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Aerodynamic Characteristics of a Supersonic Cruise Airplane Configuration at Mach Numbers of 2.30, 2.96, and 3.30

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Aerodynamic Characteristics of
a Supersonic Cruise Airplane
Configuration at Mach Numbers
of 2.30, 2.96, and 3.30

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National Aeronautics
and Space Administration

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SUMMARY

An investigation was made in the Langley Unitary Plan wind tunnel at Mach numbers of 2.30, 2.96, and 3.30 to determine the static longitudinal and lateral aerodynamic characteristics of a model of a supersonic cruise airplane. The configuration, with a design Mach number of 3.0, has a highly swept arrow wing with tip panels of lesser sweep, a fuselage chine, outboard vertical tails, and outboard engines mounted in nacelles beneath the wings. For wind-tunnel test conditions, a trimmed value above 6.0 of the maximum lift-drag ratio was obtained at the design Mach number. The configuration was statically stable, both longitudinally and laterally. Data are presented for variations of vertical-tail roll-out and toe-in and for various combinations of components. Some roll-control data are shown as are data for the various sand grit sizes used in fixing the boundary-layer transition location.

INTRODUCTION

As part of a continuing effort to verify aerodynamic concepts and to provide a data base that will lead to configurations which cruise efficiently at supersonic speeds, the National Aeronautics and Space Administration has been examining, both experimentally and analytically, a number of configurations which may have the potential for a high level of aerodynamic performance. Some of the configurations tested (for instance, refs. 1, 2, and 3) were designed to cruise efficiently at low to intermediate supersonic Mach numbers (1.4 to 2.0) while maintaining some transonic maneuver capability; these configurations were intended to provide aerodynamic technology support for advanced tactical fighter development. Other configurations (refs. 4 and 5) were designed for efficient cruise performance in the high supersonic Mach number range (2.4 to 3.0). These configurations include supersonic transports, reconnaissance airplanes, strike airplanes, and possibly interceptor airplanes.

The configuration analyzed in this report falls into the latter category. It was designed for efficient cruise performance at Mach 3.0. The configuration has a highly swept arrow-wing planform for efficient cruise performance but has reduced leading-edge sweep in the outboard-wing segment to improve subsonic performance. A narrow chine was included at the side of the fuselage from the wing leading edge forward to the fuselage nose. The configuration has outboard vertical tails which, unlike a center-line vertical

tail, do not become blanketed by the wing-fuselage wake in the low-speed, high-angle-of-attack flight region. Outboard engine nacelles located beneath the aft portion of the wing provide favorable interference on the wing.

A 0.0375-scale model of this configuration was tested in the Langley Unitary Plan wind tunnel at Mach numbers of 2.30, 2.96, and 3.30. The results of those tests are presented herein.

SYMBOLS

Force and moment data are referenced to the body axis system except for lift and drag data which are referenced to the stability axis system. The moment reference center is located at 85.862 cm (33.804 in.) from the model nose and 0.254 cm (0.100 in.) from the horizontal reference line.

Values are given in both SI and U.S. Customary Units. The measurements and calculations were made in U.S. Customary Units.

b	wing span, 57.094 cm (22.478 in.)
C_A	axial-force coefficient, $\frac{\text{Axial force}}{qS}$
$C_{A,b}$	base axial-force coefficient, $\frac{\text{Base axial force}}{qS}$
$(C_{A,b})_n$	nacelle base axial-force coefficient, $\frac{\text{Nacelle base axial force}}{qS}$
$C_{A,c}$	chamber axial-force coefficient, $\frac{\text{Chamber axial force}}{qS}$
$C_{A,i}$	internal axial-force coefficient, $\frac{\text{Internal axial force}}{qS}$
C_D	drag coefficient, $\frac{\text{Drag}}{qS}$
$C_{D,b}$	base drag coefficient, $\frac{\text{Base drag}}{qS}$
$(C_{D,b})_n$	nacelle base drag coefficient, $\frac{\text{Nacelle base drag}}{qS}$

$C_{D,c}$	chamber drag coefficient, $\frac{\text{Chamber drag}}{qS}$
$C_{D,corr}$	drag coefficient correction, $C_{D,b} + C_{D,i} + C_{D,c} + (C_{D,b})_n$
$C_{D,i}$	internal drag coefficient, $\frac{\text{Internal drag}}{qS}$
C_L	lift coefficient, $\frac{\text{Lift}}{qS}$
C_{L_α}	lift-curve slope at $C_L = 0$, per deg
C_l	rolling-moment coefficient, $\frac{\text{Rolling moment}}{qSb}$
C_{l_β}	effective-dihedral parameter, per deg
C_m	pitching-moment coefficient, $\frac{\text{Pitching moment}}{qS\bar{c}}$
$C_{m,0}$	pitching-moment coefficient at $C_L = 0$
$\frac{\partial C_m}{\partial C_L}$	longitudinal stability parameter at $C_L = 0$
C_N	normal-force coefficient, $\frac{\text{Normal force}}{qS}$
C_n	yawing-moment coefficient, $\frac{\text{Yawing moment}}{qSb}$
C_{n_β}	directional-stability parameter, per deg
C_Y	side-force coefficient, $\frac{\text{Side force}}{qS}$
C_{Y_β}	side-force parameter, per deg
c	chord
$\bar{c}$	wing reference chord, 54.333 cm (21.391 in.)

D	diameter
L/D	lift-drag ratio
M	free-stream Mach number
q	free-stream dynamic pressure, Pa
R	Reynolds number
R_T	primary test Reynolds number, $6.56 \times 10^6/\text{m}$ ($2.0 \times 10^6/\text{ft}$)
S	wing reference area, 2213 cm^2 (2.382 ft^2)
t	thickness
x	longitudinal distance from nose of model, cm (in.)
y	spanwise distance from center line, cm (in.)
α	angle of attack, deg
β	angle of sideslip, deg
δ_e	elevon deflection angle, positive when trailing edge is down, deg
δ_V	vertical-tail toe-out angle, positive when leading edge is out, deg
ΔC_l	C_l (controls deflected) - C_l (controls undeflected)
$\Delta \delta_e$	sum of elevon deflection angles, $\delta_{e,L} - \delta_{e,R}$, deg
Λ	sweep angle, deg

Subscripts:

L	left
le	leading edge

max	maximum
min	minimum
R	right
te	trailing edge

Model components:

B	body
C	chine
F _V	ventral fin
N	nacelle
V ₁	vertical tail 1 (at 70° to horizontal reference plane)
V ₂	vertical tail 2 (at 90° to horizontal reference plane)
W	wing

DESCRIPTION OF MODEL

Photographs of the model installed in the high-speed test section of the Langley Unitary Plan wind tunnel are shown in figure 1, and a three-view sketch of the model is shown in figure 2. The configuration has a modified arrow-wing planform with a leading-edge sweep of 75° on the main wing segment. Near the side of the fuselage, the wing leading edge is blended into a narrow chine which is carried forward to the apex of the fuselage planform. At 73 percent of the wing semispan, the wing leading-edge sweep changes to 60° for the outboard segment. The wing is twisted and cambered to provide a more efficient lifting surface at the cruise Mach number of 3.0.

Details of the model nacelles, vertical tails, ventral fin, and the elevon used for pitch and roll control are shown in figure 3. The engine nacelles are flow-through ducts and were mounted beneath the wing at approximately the 31-percent-semispan-wing station and extend aft of the wing trailing edge. The duct center line at the inlet face was tilted

down 1° relative to the wing reference plane and also toed inboard 1° relative to the fuselage center line.

The vertical tails were mounted at the span station where the leading-edge break occurs and could be tested at three different orientations. For one of these configurations, the vertical tail plane is normal to the horizontal reference plane and is aligned longitudinally in the free-stream direction. For another configuration, the vertical tail is mounted with the tip rolled outward 20° . For this roll orientation, the vertical tails could be aligned with the model center line or mounted with the leading edge toed out 2.25° . For some tests, a configuration was used with the ventral fin installed well aft on the fuselage.

The chines, vertical tails, ventral fin, and nacelles were independently removable from the configuration. Elevons were provided near the wing trailing edge, outboard of the nacelles and inboard of the vertical tails. These elevons could, through the use of appropriate brackets, be deflected either symmetrically for pitch control or differentially for roll control. Due to errors in manufacturing the elevon brackets, the elevon deflections differed somewhat from the nominal values, and there were some differences between the left and right elevon deflections, as shown in the following table:

Elevon deflection, δ_e			
Nominal, deg	Actual		Average, deg
	Left, deg	Right, deg	
0	0	0	0
-2	-2.1	-2.6	-2.35
-6	-6.1	-6.2	-6.15
-10	-11.5	-11.6	-11.55
10	8.7	8.5	8.60

Some of the pertinent geometric characteristics of the model are given in table I. In addition, a listing of the computer-card images is given in table II for a numerical description of the model. The format for the listing is described in reference 6. This numerical model description is for the actual wind-tunnel model which was measured on a three-axis dimension-recording machine. There were minor differences between the left and right wings in the thickness distribution and camber so the measurements were averaged to produce the numerical model description.

The ventral fin was not included in the numerical model description, nor was it included in the normal area distribution for the wind-tunnel model shown in figure 4. The

inlet capture area for the nacelles has been subtracted from the area distribution. The portion of the area distribution labeled "fuselage" arbitrarily includes all of the wing-fuselage area out to a span station 4.280 cm (1.685 in.) from the configuration center line.

TESTS AND INSTRUMENTATION

Tests were conducted in the Langley Unitary Plan wind tunnel at Mach numbers of 2.30, 2.96, and 3.30 and at stagnation pressures of 73.161 kPa (1528 lb/ft²), 103.852 kPa (2169 lb/ft²), and 124.345 kPa (2597 lb/ft²), respectively. The Reynolds number for the majority of the tests was $6.56 \times 10^6/\text{m}$ ($2.0 \times 10^6/\text{ft}$) and the stagnation temperature was held constant at 339 K (150° F) throughout the tests. The dewpoint was maintained sufficiently low to prevent condensation shocks in the tunnel.

Boundary-layer-transition inducing strips of No. 45 sand grit were applied at appropriate distances back from the leading edge of all airfoil shaped surfaces, on the interior and exterior of the nacelles, and on the configuration nose. The grit size was selected according to the method of reference 7 to insure fully turbulent flow over the model. Some limited tests were run with No. 35 grit and some were run with No. 30 grit to fix transition. These additional tests were included to help evaluate the grit drag associated with the use of the boundary-layer trips.

Forces and moments on the model were measured by means of a six-component electrical strain-gage balance which was contained within the model and connected through a supporting sting to the permanent model actuating system in the wind tunnel.

Several pressure orifices were located in both the model base and the base of one of the nacelles; these orifices were connected to an internal scanning pressure valve and transducer. Fuselage base and nacelle base pressures were measured in tests separate from the force tests; however, pressure in the balance chamber was measured continuously during the force tests. The force data were corrected to conditions of free-stream static pressure at the model base and balance chamber and at the nacelle bases. Skin-friction drag for the air flowing through the nacelle ducts was estimated and subtracted from the force data. A plot showing the base, nacelle base, and internal flow drag corrections plus typical chamber drag corrections is in figure 5. All of the corrections are relatively constant with changing angle of attack and, in general, decrease in magnitude with increasing Mach number.

All angles of attack have been adjusted for tunnel airflow misalignment and model deflection due to aerodynamic loads.

RESULTS AND DISCUSSION

The tabulated wind-tunnel data for this investigation are presented in the appendix.

Longitudinal Aerodynamic Characteristics

The baseline configuration for this test program incorporates twin vertical tails canted outboard 20° from the vertical with the leading edges toed out 2.25° . One of the early test objectives was to compare results of this particular selection of tail orientation (by comparing test results) with results of more conventional arrangements. The longitudinal aerodynamic characteristics for various vertical tail arrangements are shown in figure 6. Also shown in this figure are the test results for a configuration with the ventral fin installed.

Although there are only small differences in the drag levels and lift levels for the various configurations, the baseline configuration shows a definite advantage in $(L/D)_{\max}$ at $M = 2.96$ when compared with the other configurations. Because of the advantage in $(L/D)_{\max}$ near the design Mach number and because of adequate lateral-directional stability characteristics (which will be shown later in this report), the baseline configuration was selected to be the principal configuration for the remainder of the test program.

Some of the basic aerodynamic characteristics of the configuration at supersonic speeds can be noted from the data in figure 6. The variation of lift with angle of attack is essentially linear throughout the test range at both Mach 2.30 and 2.96. The variation of pitching moment with lift coefficient is linear near $C_L = 0$, but a tendency toward pitch-up begins at a C_L of about 0.10. The pitch-up increases with increasing C_L , and at $M = 2.96$ for the pitching-moment center chosen for this test, the configuration becomes unstable at a C_L of about 0.20. The configuration has some positive $C_{m,0}$ due to the wing twist and camber which also shifts the minimum drag point on the drag polar to a positive value of C_L .

Some of the effects of various components on the longitudinal aerodynamic characteristics of the model can be seen in figure 7. The most obvious effect is the positive increment in lift produced by the addition of the nacelles to the basic wing-body configuration. Addition of the nacelles also reduces $C_{m,0}$ and causes a nose-down pitching-moment increment at positive angles of attack. Addition of the chine or vertical tails has little effect on the lift curve, but the chine induces a nose-up pitching moment that essentially cancels the nose-down pitching moment caused by the nacelles. The addition of each component increased the minimum drag and, in general, reduced $(L/D)_{\max}$.

A summary of some of the longitudinal aerodynamic parameters for the baseline configuration is presented in figure 8. The value of zero-lift pitching moment is positive

throughout the Mach number range, and the longitudinal stability level, when evaluated near zero lift, varies from about 11 percent at $M = 2.30$ to a minimum of about 7.5 percent at $M = 3.0$. Minimum drag decreases gradually with increasing Mach number, as does the value of the lift-curve slope $C_{L\alpha}$. Untrimmed $(L/D)_{\max}$ for the baseline configuration (for wind-tunnel test conditions) varies from about 6.9 at $M = 2.30$ to 6.1 at $M = 3.30$.

An analysis was made to determine theoretical supersonic aerodynamic characteristics of the baseline configuration by using several analytic methods which are most applicable to long slender configurations such as supersonic cruise vehicles. The numerical description of the model used in the analysis was extracted from the measured coordinates of the model, as explained in the section entitled "Description of Model." The wave drag at zero lift was estimated by the method described in reference 8. Lift and moment characteristics and drag due to lift were calculated by using the method of reference 9, and skin-friction drag was estimated by the method of reference 10. One of the drag items on the model which needed to be quantified not only for the theoretical analysis but for extrapolation of the data to flight conditions is the drag associated with the sand grit strip that is used to fix the location of the boundary-layer transition to turbulent conditions. Data are presented in figure 9 to show the effects on the longitudinal aerodynamic characteristics of increasing grit size from No. 45 grit (used throughout most of the test program) to No. 30 grit. The primary effect, as expected, is on minimum drag. By using the changes in minimum drag with grit size and the guidelines from reference 11, the grit drag was estimated to be about 0.0004 at all Mach numbers of this investigation.

This grit drag, along with the wave drag, skin-friction drag, and drag due to lift, makes up the theoretical drag polars which are compared in figure 10 with experimental data for the baseline configuration. The minimum drag levels are well predicted at all Mach numbers. The slope of the lift curve is closely predicted except at $M = 3.30$ where it is slightly overpredicted; the estimated lift at $\alpha = 0^\circ$ is slightly less than the experimental data at all Mach numbers. For the pitching-moment characteristics, the slopes of the curves are well matched in the vicinity of zero lift; however, the analytic method based on linear theory cannot predict the tendency of the experimental data toward pitch-up. In addition, $C_{m,0}$ is slightly overpredicted. In general, the agreement between theory and experiment is quite good, as is usually the case when these linear theory methods are used to analyze slender airplane configurations.

Lateral-Directional Aerodynamic Characteristics

In order to establish linearity in the lateral-directional aerodynamic characteristics, which then permits computing stability derivatives from pitch polars taken at two yaw angles, data are usually taken while sweeping through a range of yaw angles at several

constant angles of attack. Such data are shown in figure 11 for the baseline configuration and in figure 12 for the configuration with vertical tail 2 and the ventral fin. The side-force coefficient is linear with β for all angles; rolling-moment coefficient is linear up to about $\beta = 6^\circ$; and yawing moment is linear up to about $\beta = 4^\circ$. Thus, the lateral-directional stability derivatives established from the data for $\beta = 0^\circ$ and 3° are valid for small angles of sideslip.

Sideslip data for the baseline configuration and for some modifications are shown in figures 13, 14, and 15. In general, the sideslip derivatives vary in a near linear fashion with angle of attack.

The sideslip data for various vertical-tail configurations are shown in figure 13. When the vertical tail is at 90° (V_2) to the wing reference plane, it has about 6 percent more side-projected area than the tail canted outward 20° (V_1), and, as expected, the configuration with V_2 exhibits slightly greater directional stability. By the same reasoning, V_1 , as a very high dihedral lifting surface, causes a greater degree of roll stability than V_2 . The configuration is directionally unstable with the vertical tail removed.

The effects of the ventral fin that are shown in figure 14 are small and affect the rolling-moment derivative at $M = 2.30$ and the side-force derivative at both $M = 2.30$ and 2.96 .

A comparison of the data for the configuration with chine on and chine off is shown in figure 15. The chine, which was destabilizing in pitch (fig. 7), causes an increase in roll and directional stability at all test Mach numbers for α greater than about 4° . For Mach 2.30, the effect of the chine tends to increase with increasing angle of attack although for Mach numbers of 2.96 and 3.30, the effect tends to be constant above an angle of attack of about 6° .

Roll- and Pitch-Control Aerodynamic Forces and Moments

Pitch control is provided by deflecting a trailing-edge control on each wing, and roll control is obtained by differentially deflecting these same controls. Tests were therefore run on the baseline configuration with various combinations of symmetric and asymmetric deflections of the trailing-edge controls. In addition, calibration tests were made at Reynolds numbers above and below the test Reynolds number to determine whether there was flow separation which was affecting the control moments at the test Reynolds number. These data (presented in fig. 16) are for the baseline configuration with the controls deflected (trailing edge up) a nominal 11.5° . There were minor changes in the lift curve, particularly at $M = 2.30$; however, the consistency of the pitching-moment curves indicates that control data obtained at the test Reynolds number should be valid.

Pitch-control data are presented in figure 17. As mentioned earlier, the angles of the control brackets were somewhat in error; the values shown in the keys in the figures are the average of the left and right control deflections. Drag increments associated with control deflections were comparatively small, and thus, in conjunction with the pitching-moment characteristics of the baseline configuration, trimmed values greater than 6.0 of $(L/D)_{\max}$ over a range of lift coefficient from 0.08 to 0.15 were achieved at Mach 2.96. Similar results at $M = 2.30$ yield levels of trimmed $(L/D)_{\max}$ above 6.5. Tests were also run with various combinations of trailing-edge control deflections (fig. 18) in order to isolate the effects of the wing's upper and lower flow conditions on the deflected surfaces. The data indicate that there are no significant differences in the absolute values of the longitudinal force and moment increments when a single control surface is deflected into the upper or lower wing flow field. Likewise, when both control surfaces were deflected either up or down, the absolute values of the force and moment increments were essentially the same.

Some of the effects of control deflections on the lateral-directional aerodynamic characteristics are shown in figures 19 to 22. Lateral-directional data are shown in figure 19 for the configuration with the controls set to produce rolling moments. Note that an adverse yawing moment develops when a control surface is deflected trailing edge up. This is due to a bouyancy field, from the deflected control, which acts on the adjacent vertical tail.

As angle of attack is increased, rolling moment appears to decrease, particularly in the intermediate angle range. This can be seen more readily in figure 20 which shows roll-control power for various control settings. This parameter was obtained by dividing the increment in rolling moment that is produced by any particular combination of control deflections by the total deflection, positive and/or negative. The solid line, showing the data for both controls deflected for roll, is the most accurate data shown, and although there are differences for the single deflected controls, they are within the data accuracy of this test. Thus a single control surface appears to be equally effective in producing rolling moment, whether deflected up or down.

In figure 21, the variation of lateral-directional aerodynamic characteristics with sideslip angle is shown for the configuration with unsymmetrical control deflections. The data curves are linear to an angle of sideslip of about 4° .

Stability derivatives are shown in figure 22 and, as can be seen, there is essentially no difference between the data for deflected and undeflected controls for either Mach number.

SUMMARY OF RESULTS

An investigation was conducted in the Langley Unitary Plan wind tunnel at Mach numbers of 2.30, 2.96, and 3.30 to determine the static longitudinal and lateral aerodynamic characteristics of a model of a supersonic cruise vehicle. Various vertical-tail arrangements and various combinations of components were tested.

The results of this investigation are as follows:

1. The configuration with the vertical tail canted outward 20° and toed outward 2.25° had a higher maximum lift-drag ratio than did the configuration with the canted tail at zero toe-out or the configuration with the same vertical tail uncanted and with zero toe-out.
2. Addition of the nacelles to the configuration increased the lift-curve slope and increased the nose-down pitching moment at positive angles of attack although the chines caused a nose-up pitching moment at positive angles of attack.
3. For the selected moment center, the configuration was stable in roll, yaw, and pitch, with onset of pitch-up at a lift coefficient of about 0.10 and the beginning of longitudinal instability occurring at a lift coefficient between 0.2 and 0.3.
4. In general, the experimental data were well predicted by theory.
5. For the wind-tunnel test conditions, trimmed values of the maximum lift-drag ratio greater than 6.5 at Mach 2.30 and 6.0 at Mach 2.96 were achieved.
6. The absolute value of control-induced rolling moment was essentially independent of whether a single control surface was deflected up or down.

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APPENDIX

PRESENTATION OF TABULATED DATA

Table AI gives the column headings which appear on the tabulated data and their corresponding symbols. Table AII is an index to the tabulated data which is presented in table AIII.

APPENDIX A

TABLE AI.- TABULATED DATA SYMBOLS

Tabulated data headings	Definition
Both axes	
ALPHA	α
BETA	β
CY	C_Y
PT	Point number
Body axis	
CA	C_A
CAB	$C_{A,b}$
CABN	$(C_{A,b})_n$
CAC	$C_{A,c}$
CAI	$C_{A,i}$
CA UNC	C_A (uncorrected)
CLB	C_l
CM	C_m
CN	C_N
CNB	C_n
R/RT	R/R_T
Stability axis	
CD	C_D
CDB	$C_{D,b}$
CDBN	$(C_{D,b})_n$
CDC	$C_{D,c}$
CDI	$C_{D,i}$
CD UNC	C_D (uncorrected)
CL	C_L
CLS	C_l
CM	C_m
CNS	C_n
L/D	L/D

APPENDIX A

TABLE AII.- INDEX TO TABULATED DATA

Batch	Run	Configuration	δ_e		ξ_v , deg	Mach number	β , deg	Remarks
			Left, deg	Right, deg				
02	5	WBNV ₁ C	0	0	2.25	2.30	0	
	6		0	0	2.25	2.30	3	
	10		0	0	2.25	2.96	0	
	11		0	0	2.25	2.96	3	
	15		0	0	2.25	3.30	0	
	16		0	0	2.25	3.30	3	
04	20	WBNV ₂ CF _V	0	0	0	2.30	0	
	21		0	0	0	2.30	3	
	25		0	0	0	2.96	0	
	26		0	0	0	2.96	3	
	30		0	0	0	3.30	0	
	31		0	0	0	3.30	3	
05	32	WBNV ₂ C	0	0	0	2.30	0	
	33		0	0	0	2.30	3	
	34		0	0	0	2.96	0	
	35		0	0	0	2.96	3	
06	36	WBNV ₁ C	0	0	0	2.96	0	
	37		0	0	0	2.96	3	
	38		0	0	0	2.30	0	
	39		0	0	0	2.30	3	
07	40	WBNV ₁ C	-2	-2	2.25	2.30	0	
	41		-2	-2	2.25	2.96	0	
08	42	WBNV ₁ C	-6	-6	2.25	2.30	0	
	43		-6	-6	2.25	2.96	0	
09	44	WBNV ₁ C	-10	-10	2.25	2.30	0	R/R _T = 0.5
	45		-10	-10	2.25	2.30	0	R/R _T = 1.0
	46		-10	-10	2.25	2.30	0	R/R _T = 2.0
	47		-10	-10	2.25	2.96	0	R/R _T = 0.5
	48		-10	-10	2.25	2.96	0	R/R _T = 1.0
	49		-10	-10	2.25	2.96	0	R/R _T = 2.5
10	50	WBNV ₁ C	10	-10	2.25	2.30	0	
	51		10	-10	2.25	2.96	0	
12	54	WBNV ₁ C	10	10	2.25	2.30	0	
	55		10	10	2.25	2.96	0	
13	56	WBNV ₁ C	-10	0	2.25	2.30	0	
	57		-10	0	2.25	2.30	3	
	64		-10	0	2.25	2.96	0	
	65		-10	0	2.25	2.96	3	

APPENDIX A

TABLE AII.- Concluded

Batch	Run	Configuration	δ_e		δ_v , deg	Mach number	β , deg	Remarks
			Left, deg	Right, deg				
14	66	WBNV ₁ C	10	0	2.25	2.30	0	
	67		10	0	2.25	2.30	3	
	74		10	0	2.25	2.96	0	
	75		10	0	2.25	2.96	3	
15	76	WBNV ₁	0	0	2.25	2.30	0	
	77		0	0	2.25	2.30	3	
	81		0	0	2.25	2.96	0	
	82		0	0	2.25	2.96	3	
	86		0	0	2.25	3.30	0	
	87		0	0	2.25	3.30	3	
16	88	WBN	0	0	---	2.30	0	
	89		0	0	---	2.96	0	
17	90	WB	0	0	---	2.30	0	
	91		0	0	---	2.96	0	
19	94	WBNV ₁ C	0	0	2.25	2.30	0	No. 30 grit
	95		0	0	2.25	2.96	0	
	96		0	0	2.25	3.30	0	
20	97	WBNC	0	0	---	2.30	0	No. 30 grit
	98		0	0	---	2.30	3	
	99		0	0	---	2.96	0	
	100		0	0	---	2.96	3	
21	101	WBNV ₁ C	0	0	2.25	2.30	0	No. 35 grit
	102		0	0	2.25	2.96	0	
	103		0	0	2.25	3.30	0	

TABLE AIII.- TABULATED DATA

UPWT PROJECT 1239					BATCH 2			RUN 5			MACH 2.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
120	.999	.01	-4.19	-.1030	.0120	.0179	.0000	-.0002	-.0005	.0007	.0004	.0013	.0010	.0153
121	.994	.01	-2.20	-.0503	.0116	.0133	-.0001	-.0001	-.0006	.0007	.0004	.0012	.0010	.0150
122	.995	.01	-1.21	-.0238	.0114	.0107	-.0002	-.0000	-.0007	.0007	.0004	.0012	.0010	.0147
123	.994	.01	-.20	.0020	.0111	.0079	-.0001	-.0000	-.0006	.0007	.0004	.0012	.0010	.0144
124	.997	.01	.81	.0291	.0107	.0050	-.0002	-.0000	-.0007	.0007	.0004	.0012	.0010	.0140
125	.998	.01	1.77	.0538	.0102	.0025	-.0002	-.0000	-.0006	.0007	.0004	.0012	.0010	.0135
126	.997	.01	2.78	.0810	.0096	-.0003	-.0003	.0000	-.0008	.0007	.0004	.0012	.0010	.0129
127	.996	.01	3.77	.1075	.0090	-.0027	-.0004	.0001	-.0009	.0007	.0004	.0012	.0010	.0122
128	.993	.00	4.79	.1355	.0083	-.0047	-.0004	.0002	-.0010	.0007	.0004	.0012	.0010	.0116
129	.993	.01	5.83	.1628	.0080	-.0059	-.0003	-.0000	-.0008	.0007	.0004	.0012	.0010	.0112
130	.995	.01	7.79	.2141	.0083	-.0067	-.0003	.0001	-.0011	.0007	.0004	.0011	.0010	.0116
131	.995	.01	9.79	.2669	.0084	-.0068	-.0004	.0002	-.0016	.0007	.0004	.0011	.0010	.0116
132	.997	.01	11.83	.3198	.0085	-.0060	-.0003	.0001	-.0015	.0008	.0005	.0011	.0010	.0118
133	.996	.01	13.82	.3717	.0087	-.0044	-.0004	.0003	-.0020	.0009	.0005	.0011	.0010	.0121

UPWT PROJECT 1239					BATCH 2			RUN 5			MACH 2.30			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
120	-5.2174	.01	-4.19	-.1015	.0195	.0179	.0000	-.0002	-.0005	.0007	.0004	.0013	.0010	.0228
121	-3.6569	.01	-2.20	-.0496	.0136	.0133	-.0001	-.0001	-.0006	.0007	.0004	.0012	.0010	.0169
122	-1.9748	.01	-1.21	-.0235	.0119	.0107	-.0002	-.0000	-.0007	.0007	.0004	.0012	.0010	.0152
123	.1880	.01	-.20	.0021	.0111	.0079	-.0001	-.0000	-.0006	.0007	.0004	.0012	.0010	.0144
124	2.5945	.01	.81	.0289	.0111	.0050	-.0002	-.0000	-.0007	.0007	.0004	.0012	.0010	.0144
125	4.4804	.01	1.77	.0533	.0119	.0025	-.0002	-.0000	-.0006	.0007	.0004	.0012	.0010	.0152
126	5.9261	.01	2.78	.0802	.0135	-.0003	-.0003	.0001	-.0008	.0007	.0004	.0012	.0010	.0168
127	6.6489	.01	3.77	.1064	.0160	-.0027	-.0004	.0001	-.0009	.0007	.0004	.0012	.0010	.0193
128	6.8392	.00	4.79	.1340	.0196	-.0047	-.0004	.0002	-.0010	.0007	.0004	.0012	.0010	.0229
129	6.5732	.01	5.83	.1607	.0245	-.0059	-.0003	-.0000	-.0008	.0007	.0004	.0012	.0010	.0277
130	5.6466	.01	7.79	.2105	.0373	-.0067	-.0003	.0001	-.0011	.0007	.0004	.0011	.0010	.0405
131	4.9633	.01	9.79	.2609	.0537	-.0068	-.0003	.0003	-.0016	.0007	.0004	.0011	.0010	.0569
132	4.2007	.01	11.83	.3105	.0739	-.0060	-.0002	.0002	-.0015	.0008	.0004	.0011	.0009	.0772
133	3.6797	.01	13.82	.3579	.0973	-.0044	-.0003	.0004	-.0020	.0009	.0005	.0010	.0009	.1006

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 2			RUN 6		MACH 2.30				
BODY AXIS		AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
135	1.000	3.07	-4.19	-.1019	.0119	.0174	-.0006	.0031	-.0207	.0008	.0004	.0013	.0010	.0153
136	1.001	3.05	-2.19	-.0494	.0116	.0129	-.0014	.0035	-.0201	.0008	.0004	.0012	.0010	.0150
137	1.001	3.05	-1.21	-.0232	.0114	.0103	-.0018	.0035	-.0199	.0007	.0004	.0012	.0010	.0148
138	1.000	3.05	-.19	.0032	.0111	.0076	-.0022	.0035	-.0198	.0007	.0004	.0012	.0010	.0144
139	.999	3.05	.79	.0285	.0107	.0050	-.0027	.0035	-.0200	.0007	.0004	.0012	.0010	.0141
140	1.000	3.05	1.84	.0557	.0102	.0023	-.0033	.0035	-.0204	.0007	.0004	.0012	.0010	.0136
141	.999	3.05	2.83	.0820	.0097	-.0002	-.0037	.0036	-.0208	.0007	.0004	.0012	.0010	.0130
142	1.000	3.06	3.87	.1105	.0091	-.0024	-.0040	.0035	-.0210	.0007	.0004	.0012	.0010	.0124
143	.999	3.05	4.85	.1362	.0088	-.0039	-.0044	.0037	-.0210	.0008	.0004	.0012	.0010	.0121
144	.997	3.04	5.79	.1615	.0086	-.0050	-.0048	.0038	-.0205	.0008	.0004	.0012	.0010	.0119
145	.989	3.01	7.86	.2165	.0084	-.0060	-.0058	.0043	-.0196	.0008	.0004	.0011	.0010	.0117
146	.988	3.00	9.78	.2658	.0082	-.0060	-.0063	.0045	-.0187	.0008	.0004	.0011	.0010	.0116
147	.990	2.96	11.83	.3202	.0084	-.0051	-.0071	.0054	-.0179	.0008	.0005	.0011	.0010	.0117
148	.991	2.95	13.80	.3723	.0085	-.0035	-.0078	.0051	-.0158	.0009	.0005	.0011	.0010	.0119

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UPWT PROJECT 1239				BATCH 2				RUN 6				MACH 2.30			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
135	-5.1983	3.07	-4.19	-.1004	.0193	.0174	-.0009	.0031	-.0207	.0008	.0004	.0013	.0010	.0227	
136	-3.6135	3.05	-2.19	-.0487	.0135	.0129	-.0015	.0034	-.0201	.0008	.0004	.0012	.0010	.0169	
137	-1.9208	3.05	-1.21	-.0228	.0119	.0103	-.0019	.0035	-.0199	.0007	.0004	.0012	.0010	.0152	
138	.2957	3.05	-.19	.0033	.0111	.0076	-.0022	.0034	-.0198	.0007	.0004	.0012	.0010	.0144	
139	2.5515	3.05	.79	.0284	.0111	.0050	-.0027	.0035	-.0200	.0007	.0004	.0012	.0010	.0145	
140	4.5998	3.05	1.84	.0552	.0120	.0023	-.0032	.0036	-.0204	.0007	.0004	.0012	.0010	.0153	
141	5.9257	3.05	2.83	.0813	.0137	-.0002	-.0036	.0038	-.0208	.0007	.0004	.0012	.0010	.0170	
142	6.6198	3.06	3.87	.1094	.0165	-.0024	-.0039	.0038	-.0210	.0007	.0004	.0012	.0010	.0198	
143	6.6326	3.05	4.85	.1346	.0203	-.0039	-.0041	.0041	-.0210	.0008	.0004	.0012	.0010	.0236	
144	6.4117	3.04	5.79	.1594	.0249	-.0050	-.0044	.0043	-.0205	.0008	.0004	.0012	.0010	.0282	
145	5.6161	3.01	7.86	.2128	.0379	-.0060	-.0052	.0051	-.0196	.0008	.0004	.0011	.0010	.0412	
146	4.8811	3.00	9.78	.2598	.0532	-.0060	-.0054	.0055	-.0187	.0008	.0004	.0011	.0010	.0565	
147	4.2119	2.96	11.83	.3109	.0738	-.0051	-.0058	.0067	-.0179	.0008	.0004	.0011	.0009	.0771	
148	3.6926	2.95	13.80	.3585	.0971	-.0035	-.0063	.0068	-.0158	.0009	.0005	.0010	.0009	.1004	

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 2			RUN 10			MACH 2.96			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
185	1.000	.01	-4.04	-.0809	.0105	.0126	-.0000	-.0002	-.0003	.0005	.0003	.0008	.0009	.0129
186	1.000	.01	-2.07	-.0372	.0102	.0096	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0126
187	1.000	.01	-1.10	-.0157	.0100	.0078	-.0001	-.0001	-.0003	.0005	.0003	.0007	.0009	.0123
188	1.000	.01	-.04	.0085	.0097	.0055	-.0001	-.0001	-.0003	.0005	.0003	.0007	.0009	.0121
189	1.001	.01	.95	.0303	.0095	.0035	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0119
190	1.001	.01	1.94	.0529	.0092	.0015	-.0002	-.0002	-.0003	.0005	.0003	.0007	.0009	.0116
191	1.002	.01	2.98	.0762	.0090	-.0004	-.0002	-.0002	-.0003	.0005	.0003	.0007	.0009	.0114
192	1.002	.01	3.95	.0968	.0087	-.0016	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0111
193	1.003	.01	4.92	.1187	.0084	-.0027	-.0001	-.0002	-.0004	.0005	.0003	.0007	.0009	.0108
194	1.001	.01	5.93	.1410	.0082	-.0035	-.0001	-.0002	-.0004	.0005	.0003	.0007	.0009	.0106
195	1.000	.01	7.96	.1875	.0081	-.0042	-.0001	-.0001	-.0007	.0005	.0003	.0007	.0009	.0105
196	1.001	.01	9.92	.2297	.0082	-.0038	-.0001	-.0001	-.0008	.0005	.0003	.0007	.0009	.0106
197	1.002	.01	11.92	.2751	.0085	-.0025	-.0000	-.0001	-.0010	.0006	.0003	.0007	.0009	.0109
198	1.002	.01	13.95	.3211	.0088	-.0007	.0001	-.0001	-.0010	.0006	.0003	.0007	.0009	.0114
199	1.002	.00	15.95	.3694	.0092	.0013	-.0000	.0001	-.0008	.0007	.0004	.0007	.0009	.0118
200	1.000	.01	4.63	.1139	.0085	-.0024	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0109

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UPWT PROJECT 1239					BATCH 2			RUN 10			MACH 2.96			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
185	-4.9360	.01	-4.04	-.0797	.0161	.0126	-.0000	-.0002	-.0003	.0005	.0003	.0008	.0009	.0186
186	-3.1884	.01	-2.07	-.0367	.0115	.0096	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0139
187	-1.4990	.01	-1.10	-.0154	.0103	.0078	-.0001	-.0001	-.0003	.0005	.0003	.0007	.0009	.0126
188	.8811	.01	-.04	.0086	.0097	.0055	-.0001	-.0001	-.0003	.0005	.0003	.0007	.0009	.0121
189	3.0085	.01	.95	.0301	.0100	.0035	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0124
190	4.7635	.01	1.94	.0524	.0110	.0015	-.0002	-.0002	-.0003	.0005	.0003	.0007	.0009	.0134
191	5.8376	.01	2.98	.0754	.0129	-.0004	-.0002	-.0002	-.0003	.0005	.0003	.0007	.0009	.0153
192	6.2505	.01	3.95	.0958	.0153	-.0016	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0177
193	6.3301	.01	4.92	.1173	.0185	-.0027	-.0001	-.0002	-.0004	.0005	.0003	.0007	.0009	.0209
194	6.1197	.01	5.93	.1391	.0227	-.0035	-.0001	-.0002	-.0004	.0005	.0003	.0007	.0009	.0251
195	5.4120	.01	7.96	.1841	.0340	-.0042	-.0001	-.0001	-.0007	.0005	.0003	.0007	.0009	.0363
196	4.7085	.01	9.92	.2244	.0477	-.0038	-.0001	-.0001	-.0008	.0005	.0003	.0007	.0009	.0500
197	4.0986	.01	11.92	.2668	.0651	-.0025	-.0000	-.0001	-.0010	.0006	.0003	.0007	.0008	.0675
198	3.5926	.01	13.95	.3088	.0859	-.0007	.0000	-.0001	-.0010	.0006	.0003	.0007	.0008	.0884
199	3.1882	.00	15.95	.3518	.1103	.0013	.0000	.0001	-.0008	.0007	.0003	.0007	.0008	.1128
200	6.3767	.01	4.63	.1126	.0177	-.0024	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0201

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 2				RUN 11				MACH 2.96			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
202	1.002	3.06	-4.08	-.0822	.0106	.0124	-.0004	.0019	-.0187	.0006	.0003	.0008	.0009	.0131	
203	1.002	3.05	-2.06	-.0387	.0104	.0096	-.0006	.0023	-.0184	.0005	.0003	.0007	.0009	.0128	
204	1.001	3.04	-1.06	-.0161	.0103	.0077	-.0007	.0024	-.0183	.0005	.0003	.0007	.0009	.0127	
205	1.001	3.05	-.05	.0062	.0100	.0058	-.0008	.0022	-.0181	.0005	.0003	.0007	.0009	.0124	
206	1.000	3.05	.94	.0279	.0098	.0040	-.0008	.0020	-.0180	.0005	.0003	.0007	.0009	.0122	
207	1.000	3.06	1.94	.0506	.0095	.0021	-.0008	.0016	-.0177	.0005	.0003	.0007	.0009	.0119	
208	1.000	3.07	2.96	.0737	.0091	.0003	-.0010	.0015	-.0178	.0005	.0003	.0007	.0009	.0115	
209	1.001	3.07	3.94	.0952	.0088	-.0010	-.0013	.0015	-.0183	.0005	.0003	.0007	.0009	.0112	
210	1.000	3.07	4.94	.1175	.0087	-.0020	-.0016	.0016	-.0185	.0005	.0003	.0007	.0009	.0111	
211	.999	3.06	5.94	.1400	.0086	-.0027	-.0021	.0018	-.0184	.0005	.0003	.0007	.0009	.0110	
212	1.000	3.06	7.94	.1851	.0085	-.0034	-.0029	.0019	-.0179	.0005	.0003	.0007	.0009	.0109	
213	1.000	3.05	9.93	.2301	.0084	-.0029	-.0036	.0016	-.0164	.0006	.0003	.0007	.0009	.0108	
214	1.000	3.05	11.94	.2759	.0085	-.0019	-.0043	.0014	-.0152	.0006	.0003	.0007	.0009	.0110	
215	1.000	3.04	13.94	.3218	.0089	-.0003	-.0050	.0013	-.0140	.0007	.0003	.0007	.0009	.0115	
216	1.000	3.03	15.93	.3704	.0092	.0016	-.0060	.0018	-.0140	.0007	.0004	.0007	.0009	.0118	
217	1.002	3.07	4.63	.1119	.0088	-.0017	-.0015	.0016	-.0185	.0005	.0003	.0007	.0009	.0111	

UPWT PROJECT 1239				BATCH 2				RUN 11				MACH 2.96			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
202	-4.9204	3.06	-4.08	-.0810	.0165	.0124	-.0006	.0019	-.0187	.0006	.0003	.0008	.0009	.0189	
203	-3.2397	3.05	-2.06	-.0381	.0118	.0096	-.0007	.0023	-.0184	.0005	.0003	.0007	.0009	.0142	
204	-1.4956	3.04	-1.06	-.0158	.0106	.0077	-.0008	.0024	-.0183	.0005	.0003	.0007	.0009	.0130	
205	.6160	3.05	-.05	.0062	.0100	.0058	-.0008	.0022	-.0181	.0005	.0003	.0007	.0009	.0124	
206	2.6950	3.05	.94	.0277	.0103	.0040	-.0007	.0020	-.0180	.0005	.0003	.0007	.0009	.0127	
207	4.4849	3.06	1.94	.0502	.0112	.0021	-.0007	.0017	-.0177	.0005	.0003	.0007	.0009	.0136	
208	5.6442	3.07	2.96	.0730	.0129	.0003	-.0009	.0015	-.0178	.0005	.0003	.0007	.0009	.0153	
209	6.1386	3.07	3.94	.0942	.0153	-.0010	-.0012	.0016	-.0183	.0005	.0003	.0007	.0009	.0177	
210	6.1892	3.07	4.94	.1161	.0188	-.0020	-.0015	.0017	-.0185	.0005	.0003	.0007	.0009	.0211	
211	5.9794	3.06	5.94	.1381	.0231	-.0027	-.0019	.0020	-.0184	.0005	.0003	.0007	.0009	.0255	
212	5.3492	3.06	7.94	.1817	.0340	-.0034	-.0026	.0022	-.0179	.0005	.0003	.0007	.0009	.0363	
213	4.6858	3.05	9.93	.2247	.0479	-.0029	-.0033	.0022	-.0164	.0006	.0003	.0007	.0009	.0503	
214	4.0882	3.05	11.94	.2675	.0654	-.0019	-.0039	.0022	-.0152	.0006	.0003	.0007	.0008	.0679	
215	3.5918	3.04	13.94	.3094	.0861	-.0003	-.0046	.0024	-.0140	.0006	.0003	.0007	.0008	.0886	
216	3.1931	3.03	15.93	.3529	.1105	.0016	-.0053	.0034	-.0140	.0007	.0003	.0007	.0008	.1130	
217	6.2297	3.07	4.63	.1106	.0178	-.0017	-.0014	.0017	-.0185	.0005	.0003	.0007	.0009	.0201	

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 2			RUN 15		MACH 3.30				
BODY AXIS	AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
251	1.002	-.01	-4.11	-.0746	.0098	.0109	.0001	-.0003	-.0001	.0004	.0003	.0007	.0008	.0119
252	1.002	-.01	-2.11	-.0343	.0095	.0081	.0001	-.0003	.0000	.0004	.0003	.0006	.0008	.0116
253	.999	-.01	-1.11	-.0147	.0094	.0065	.0001	-.0003	.0000	.0004	.0003	.0006	.0008	.0115
254	.999	-.01	-.12	.0058	.0092	.0048	.0000	-.0002	-.0001	.0004	.0003	.0006	.0008	.0113
255	.999	-.01	.90	.0266	.0090	.0031	.0000	-.0002	-.0001	.0004	.0003	.0006	.0008	.0110
256	.997	-.01	1.89	.0458	.0088	.0017	-.0000	-.0003	-.0001	.0004	.0003	.0006	.0008	.0109
257	.999	-.01	2.87	.0660	.0086	.0003	-.0000	-.0003	-.0001	.0004	.0003	.0006	.0008	.0107
258	.998	-.01	3.89	.0860	.0084	-.0009	-.0001	-.0002	-.0001	.0004	.0003	.0006	.0008	.0105
259	.997	-.01	4.88	.1058	.0082	-.0018	-.0000	-.0002	-.0002	.0004	.0003	.0006	.0008	.0103
260	.999	-.01	5.90	.1268	.0082	-.0025	-.0001	-.0002	-.0002	.0004	.0003	.0005	.0008	.0102
261	1.000	-.01	7.90	.1681	.0081	-.0033	-.0001	-.0001	-.0005	.0004	.0002	.0005	.0008	.0101
262	1.001	-.01	9.89	.2096	.0083	-.0031	-.0001	-.0001	-.0006	.0004	.0003	.0005	.0008	.0103
263	1.000	-.01	11.89	.2518	.0086	-.0020	-.0000	-.0002	-.0008	.0005	.0003	.0005	.0008	.0107

UPWT PROJECT 1239					BATCH 2			RUN 15			MACH 3.30			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
251	-4.8621	-.01	-4.11	-.0734	.0151	.0109	.0002	-.0003	-.0001	.0004	.0003	.0006	.0008	.0172
252	-3.1324	-.01	-2.11	-.0338	.0108	.0081	.0001	-.0003	.0000	.0004	.0003	.0006	.0008	.0129
253	-1.4917	-.01	-1.11	-.0144	.0097	.0065	.0001	-.0003	.0000	.0004	.0003	.0006	.0008	.0117
254	.6366	-.01	-.12	.0059	.0092	.0048	.0000	-.0002	-.0001	.0004	.0003	.0006	.0008	.0113
255	2.8070	-.01	.90	.0264	.0094	.0031	-.0000	-.0002	-.0001	.0004	.0003	.0006	.0008	.0115
256	4.4030	-.01	1.89	.0454	.0103	.0017	-.0000	-.0003	-.0001	.0004	.0003	.0006	.0008	.0124
257	5.4793	-.01	2.87	.0653	.0119	.0003	-.0001	-.0003	-.0001	.0004	.0003	.0006	.0008	.0140
258	5.9740	-.01	3.89	.0850	.0142	-.0009	-.0001	-.0002	-.0001	.0004	.0003	.0006	.0008	.0163
259	6.0740	-.01	4.88	.1045	.0172	-.0018	-.0001	-.0002	-.0002	.0004	.0003	.0006	.0008	.0193
260	5.9156	-.01	5.90	.1251	.0211	-.0025	-.0001	-.0002	-.0002	.0004	.0002	.0005	.0008	.0232
261	5.2971	-.01	7.90	.1650	.0312	-.0033	-.0001	-.0001	-.0005	.0004	.0002	.0005	.0008	.0331
262	4.6383	-.01	9.89	.2046	.0441	-.0031	-.0001	-.0001	-.0006	.0004	.0003	.0005	.0008	.0461
263	4.0481	-.01	11.89	.2441	.0603	-.0020	-.0001	-.0001	-.0008	.0005	.0003	.0005	.0008	.0624

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 2			RUN 16		MACH 3.30				
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CL3	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
265	1.000	3.07	-4.13	-.0758	.0101	.0107	-.0000	.0007	-.0168	.0004	.0003	.0007	.0008	.0122
266	1.001	3.06	-2.13	-.0361	.0098	.0083	-.0000	.0009	-.0161	.0004	.0003	.0006	.0008	.0120
267	1.000	3.06	-1.13	-.0161	.0097	.0068	-.0000	.0009	-.0159	.0004	.0003	.0006	.0008	.0118
268	1.000	3.06	-.10	.0041	.0095	.0052	.0000	.0008	-.0156	.0004	.0003	.0006	.0008	.0116
269	1.001	3.07	.88	.0240	.0092	.0036	.0000	.0005	-.0153	.0004	.0003	.0006	.0008	.0113
270	1.000	3.07	1.89	.0447	.0090	.0020	.0000	.0003	-.0152	.0004	.0003	.0006	.0008	.0111
271	1.000	3.08	2.89	.0647	.0088	.0006	-.0002	.0002	-.0155	.0004	.0003	.0006	.0008	.0109
272	1.000	3.08	3.90	.0852	.0086	-.0005	-.0005	.0004	-.0160	.0004	.0003	.0006	.0008	.0106
273	1.000	3.07	4.89	.1049	.0085	-.0013	-.0009	.0006	-.0165	.0004	.0003	.0006	.0008	.0106
274	1.000	3.07	5.88	.1252	.0085	-.0019	-.0013	.0009	-.0168	.0004	.0003	.0005	.0008	.0105
275	1.000	3.06	7.89	.1667	.0084	-.0024	-.0021	.0013	-.0167	.0004	.0002	.0005	.0008	.0104
276	1.000	3.05	9.90	.2094	.0085	-.0023	-.0028	.0014	-.0161	.0004	.0003	.0005	.0008	.0105
277	1.000	3.04	11.90	.2518	.0088	-.0016	-.0035	.0013	-.0154	.0005	.0003	.0005	.0008	.0109

UPWT PROJECT 1239					BATCH 2			RUN 16			MACH 3.30			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
265	-4.8212	3.07	-4.13	-.0747	.0155	.0107	-.0001	.0007	-.0168	.0004	.0003	.0006	.0008	.0177
266	-3.1871	3.06	-2.13	-.0356	.0112	.0083	-.0001	.0009	-.0161	.0004	.0003	.0006	.0008	.0133
267	-1.5872	3.06	-1.13	-.0159	.0100	.0068	-.0000	.0009	-.0159	.0004	.0003	.0006	.0008	.0121
268	.4346	3.06	-.10	.0041	.0095	.0052	.0000	.0008	-.0156	.0004	.0003	.0006	.0008	.0116
269	2.4746	3.07	.88	.0238	.0096	.0036	.0001	.0005	-.0153	.0004	.0003	.0006	.0008	.0117
270	4.2182	3.07	1.89	.0443	.0105	.0020	.0000	.0003	-.0152	.0004	.0003	.0006	.0008	.0126
271	5.3179	3.08	2.89	.0641	.0121	.0006	-.0002	.0002	-.0155	.0004	.0003	.0006	.0008	.0141
272	5.8762	3.08	3.90	.0843	.0143	-.0005	-.0005	.0004	-.0160	.0004	.0003	.0006	.0008	.0164
273	5.9542	3.07	4.89	.1036	.0174	-.0013	-.0008	.0007	-.0165	.0004	.0003	.0006	.0008	.0194
274	5.8071	3.07	5.88	.1234	.0213	-.0019	-.0012	.0010	-.0168	.0004	.0002	.0005	.0008	.0233
275	5.2385	3.06	7.89	.1636	.0312	-.0024	-.0019	.0016	-.0167	.0004	.0002	.0005	.0008	.0332
276	4.6078	3.05	9.90	.2044	.0444	-.0023	-.0025	.0018	-.0161	.0004	.0003	.0005	.0008	.0464
277	4.0355	3.04	11.90	.2441	.0605	-.0016	-.0031	.0020	-.0154	.0005	.0003	.0005	.0008	.0626

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 4			RUN 20			MACH 2.30			
BODY AXIS		AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
339	.997	.01	-4.17	-.0954	.0118	.0154	-.0001	-.0004	.0000	.0008	.0004	.0013	.0010	.0152
340	.996	.01	-2.22	-.0472	.0116	.0117	-.0002	-.0003	-.0000	.0008	.0004	.0012	.0010	.0150
341	1.000	.01	-1.21	-.0212	.0114	.0096	-.0002	-.0002	-.0004	.0007	.0004	.0012	.0010	.0148
342	.999	.01	-.20	.0037	.0112	.0073	-.0001	-.0002	-.0002	.0007	.0004	.0012	.0010	.0146
343	.998	.01	.81	.0304	.0110	.0049	-.0002	-.0002	-.0002	.0007	.0004	.0012	.0010	.0143
344	.999	.01	1.81	.0559	.0106	.0025	-.0003	-.0001	-.0005	.0007	.0004	.0012	.0010	.0139
345	.998	.01	2.82	.0821	.0100	.0004	-.0002	-.0001	-.0005	.0007	.0004	.0012	.0010	.0134
346	.999	.01	3.81	.1084	.0094	-.0017	-.0002	-.0001	-.0005	.0007	.0004	.0012	.0010	.0127
347	.999	.01	4.81	.1352	.0089	-.0034	-.0003	.0000	-.0009	.0007	.0004	.0012	.0010	.0122
348	.999	.01	5.84	.1622	.0085	-.0046	-.0002	-.0002	-.0007	.0007	.0004	.0012	.0010	.0118
349	.999	.02	7.79	.2139	.0088	-.0059	-.0001	-.0002	-.0008	.0007	.0004	.0011	.0010	.0120
350	1.000	.01	9.82	.2675	.0088	-.0060	-.0002	-.0000	-.0013	.0007	.0004	.0011	.0010	.0121
351	.998	.02	11.84	.3203	.0089	-.0054	-.0001	-.0001	-.0013	.0008	.0005	.0011	.0010	.0122
352	.999	.01	13.83	.3729	.0092	-.0040	-.0002	.0001	-.0015	.0009	.0005	.0011	.0010	.0125

UPWT PROJECT 1239				BATCH 4				RUN 20			MACH 2.30			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
339	-5.0298	.01	-4.17	-.0939	.0187	.0154	-.0001	-.0004	.0000	.0008	.0004	.0013	.0010	.0221
340	-3.4651	.01	-2.22	-.0465	.0134	.0117	-.0002	-.0003	-.0000	.0008	.0004	.0012	.0010	.0168
341	-1.7473	.01	-1.21	-.0208	.0119	.0096	-.0002	-.0002	-.0004	.0007	.0004	.0012	.0010	.0153
342	.3393	.01	-.20	.0038	.0112	.0073	-.0001	-.0002	-.0002	.0007	.0004	.0012	.0010	.0146
343	2.6501	.01	.81	.0302	.0114	.0049	-.0002	-.0002	-.0002	.0007	.0004	.0012	.0010	.0147
344	4.4935	.01	1.81	.0555	.0123	.0025	-.0003	-.0001	-.0005	.0007	.0004	.0012	.0010	.0157
345	5.7828	.01	2.82	.0813	.0141	.0004	-.0002	-.0001	-.0005	.0007	.0004	.0012	.0010	.0174
346	6.4588	.01	3.81	.1073	.0166	-.0017	-.0002	-.0001	-.0005	.0007	.0004	.0012	.0010	.0199
347	6.6276	.01	4.81	.1336	.0202	-.0034	-.0003	.0001	-.0009	.0007	.0004	.0012	.0010	.0234
348	6.4066	.01	5.84	.1600	.0250	-.0046	-.0002	-.0002	-.0007	.0007	.0004	.0012	.0010	.0282
349	5.5705	.02	7.79	.2102	.0377	-.0059	-.0001	-.0002	-.0008	.0007	.0004	.0011	.0010	.0409
350	4.8122	.01	9.82	.2614	.0543	-.0060	-.0002	.0000	-.0013	.0007	.0004	.0011	.0010	.0575
351	4.1757	.02	11.84	.3109	.0745	-.0054	-.0002	-.0001	-.0013	.0008	.0004	.0011	.0009	.0777
352	3.6611	.01	13.83	.3590	.0981	-.0040	-.0002	.0001	-.0015	.0008	.0005	.0010	.0009	.1013

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 4			RUN 21			MACH 2.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
354	1.000	3.04	-4.17	-.0970	.0117	.0149	.0003	.0037	-.0223	.0008	.0004	.0013	.0010	.0152
355	1.000	3.03	-2.15	-.0455	.0116	.0115	-.0006	.0040	-.0218	.0008	.0004	.0012	.0010	.0151
356	.999	3.03	-1.19	-.0210	.0115	.0094	-.0010	.0039	-.0216	.0008	.0004	.0012	.0010	.0149
357	1.000	3.03	-.22	.0034	.0113	.0073	-.0015	.0037	-.0213	.0008	.0004	.0012	.0010	.0147
358	.999	3.04	.83	.0299	.0110	.0049	-.0020	.0036	-.0213	.0008	.0004	.0012	.0010	.0144
359	1.000	3.04	1.81	.0551	.0106	.0028	-.0026	.0037	-.0218	.0008	.0004	.0012	.0010	.0140
360	1.000	3.04	2.80	.0805	.0102	.0008	-.0030	.0038	-.0224	.0008	.0004	.0012	.0010	.0135
361	1.000	3.04	3.87	.1094	.0096	-.0011	-.0033	.0038	-.0228	.0008	.0004	.0012	.0010	.0130
362	1.000	3.04	4.77	.1332	.0094	-.0026	-.0037	.0040	-.0228	.0008	.0004	.0012	.0010	.0128
363	1.000	3.03	5.82	.1617	.0091	-.0038	-.0042	.0040	-.0220	.0008	.0004	.0012	.0010	.0125
364	1.000	3.00	7.77	.2117	.0089	-.0048	-.0050	.0047	-.0214	.0008	.0004	.0011	.0010	.0122
365	1.001	2.97	9.83	.2681	.0088	-.0053	-.0058	.0052	-.0204	.0008	.0004	.0011	.0010	.0121
366	1.000	2.93	11.84	.3208	.0089	-.0046	-.0064	.0060	-.0201	.0008	.0005	.0011	.0010	.0121
367	1.000	2.92	13.79	.3719	.0091	-.0031	-.0071	.0060	-.0184	.0009	.0005	.0011	.0010	.0124

UPWT PROJECT 1239					BATCH 4			RUN 21			MACH 2.30				
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
354	-5.0893	3.04	-4.17	-.0955	.0188	.0149	-.0000	.0037	-.0223	.0008	.0004	.0013	.0010	.0222	
355	-3.3640	3.03	-2.15	-.0448	.0133	.0115	-.0007	.0039	-.0218	.0008	.0004	.0012	.0010	.0168	
356	-1.7294	3.03	-1.19	-.0207	.0120	.0094	-.0011	.0039	-.0216	.0008	.0004	.0012	.0010	.0154	
357	.3114	3.03	-.22	.0035	.0113	.0073	-.0015	.0037	-.0213	.0008	.0004	.0012	.0010	.0147	
358	2.6019	3.04	.83	.0297	.0114	.0049	-.0019	.0036	-.0213	.0008	.0004	.0012	.0010	.0148	
359	4.4211	3.04	1.81	.0546	.0124	.0028	-.0025	.0038	-.0218	.0008	.0004	.0012	.0010	.0157	
360	5.6665	3.04	2.80	.0797	.0141	.0008	-.0028	.0039	-.0224	.0008	.0004	.0012	.0010	.0174	
361	6.3735	3.04	3.87	.1083	.0170	-.0011	-.0031	.0040	-.0228	.0008	.0004	.0012	.0010	.0203	
362	6.4293	3.04	4.77	.1317	.0205	-.0026	-.0033	.0043	-.0228	.0008	.0004	.0012	.0010	.0238	
363	6.2588	3.03	5.82	.1596	.0255	-.0038	-.0037	.0044	-.0220	.0008	.0004	.0012	.0010	.0288	
364	5.5586	3.00	7.77	.2080	.0374	-.0048	-.0043	.0054	-.0214	.0008	.0004	.0011	.0010	.0407	
365	4.9135	2.97	9.83	.2620	.0544	-.0053	-.0049	.0061	-.0204	.0008	.0004	.0011	.0010	.0577	
366	4.1809	2.93	11.84	.3113	.0745	-.0046	-.0051	.0072	-.0201	.0008	.0004	.0011	.0009	.0777	
367	3.6744	2.92	13.79	.3580	.0974	-.0031	-.0054	.0075	-.0184	.0008	.0005	.0010	.0009	.1007	

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 4				RUN 25		MACH 2.96					
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
399	1.000	.01	-4.04	-.0768	.0105	.0106	-.0000	-.0004	.0002	.0005	.0003	.0008	.0009	.0129	
400	.999	.01	-2.07	-.0349	.0103	.0086	-.0001	-.0003	-.0000	.0005	.0003	.0007	.0009	.0128	
401	.999	.01	-1.06	-.0125	.0102	.0071	-.0001	-.0003	-.0000	.0005	.0003	.0007	.0009	.0126	
402	.999	.01	-.03	.0088	.0100	.0055	-.0000	-.0003	.0001	.0005	.0003	.0007	.0009	.0124	
403	1.002	.01	.93	.0304	.0099	.0037	-.0001	-.0003	-.0002	.0005	.0003	.0007	.0009	.0122	
404	1.002	.01	1.93	.0525	.0097	.0021	-.0001	-.0003	-.0002	.0005	.0003	.0007	.0009	.0121	
405	1.002	.01	2.97	.0751	.0095	.0006	-.0001	-.0003	-.0001	.0005	.0003	.0007	.0009	.0119	
406	1.002	.01	3.94	.0956	.0092	-.0005	-.0001	-.0003	-.0001	.0005	.0003	.0007	.0009	.0116	
407	1.001	.01	4.99	.1194	.0089	-.0015	-.0001	-.0003	-.0002	.0005	.0003	.0007	.0009	.0113	
408	1.001	.01	5.93	.1398	.0088	-.0022	-.0001	-.0003	-.0003	.0005	.0003	.0007	.0009	.0111	
409	1.002	.01	7.89	.1842	.0087	-.0029	-.0000	-.0003	-.0005	.0005	.0003	.0007	.0009	.0111	
410	1.001	.01	9.93	.2293	.0089	-.0026	.0000	-.0003	-.0003	.0005	.0003	.0007	.0009	.0112	
411	1.000	.01	9.93	.2298	.0088	-.0025	-.0030	-.0002	-.0006	.0005	.0003	.0007	.0009	.0112	
412	1.000	.01	11.93	.2743	.0091	-.0013	.0000	-.0003	-.0006	.0006	.0003	.0007	.0009	.0116	
413	.999	.01	13.96	.3213	.0095	.0005	.0000	-.0002	-.0008	.0006	.0003	.0007	.0009	.0120	

UPWT PROJECT 1239				BATCH 4			RUN 25			MACH 2.96				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
399	-4.7725	.01	-4.04	-.0756	.0158	.0106	-.0000	-.0004	.0002	.0005	.0003	.0008	.0009	.0183
400	-2.9579	.01	-2.07	-.0343	.0116	.0086	-.0001	-.0004	-.0000	.0005	.0003	.0007	.0009	.0140
401	-1.1649	.01	-1.06	-.0122	.0105	.0071	-.0001	-.0003	-.0000	.0005	.0003	.0007	.0009	.0128
402	.8810	.01	-.03	.0088	.0100	.0055	-.0000	-.0003	.0001	.0005	.0003	.0007	.0009	.0124
403	2.9184	.01	.93	.0302	.0104	.0037	-.0001	-.0003	-.0002	.0005	.0003	.0007	.0009	.0127
404	4.5369	.01	1.93	.0520	.0115	.0021	-.0001	-.0003	-.0002	.0005	.0003	.0007	.0009	.0138
405	5.5663	.01	2.97	.0744	.0134	.0006	-.0001	-.0003	-.0001	.0005	.0003	.0007	.0009	.0157
406	5.9919	.01	3.94	.0945	.0158	-.0005	-.0001	-.0003	-.0001	.0005	.0003	.0007	.0009	.0181
407	6.1139	.01	4.99	.1180	.0193	-.0015	-.0001	-.0003	-.0002	.0005	.0003	.0007	.0009	.0217
408	5.9554	.01	5.93	.1378	.0231	-.0022	-.0001	-.0003	-.0003	.0005	.0003	.0007	.0009	.0255
409	5.3271	.01	7.89	.1808	.0339	-.0029	-.0001	-.0003	-.0005	.0005	.0003	.0007	.0009	.0362
410	4.6399	.01	9.93	.2238	.0482	-.0026	-.0000	-.0003	-.0003	.0005	.0003	.0007	.0009	.0506
411	4.6411	.01	9.93	.2243	.0483	-.0025	-.0001	-.0002	-.0006	.0005	.0003	.0007	.0009	.0507
412	4.0510	.01	11.93	.2659	.0656	-.0013	-.0000	-.0003	-.0006	.0005	.0003	.0007	.0008	.0680
413	3.5604	.01	13.96	.3088	.0867	.0005	-.0000	-.0002	-.0008	.0006	.0003	.0007	.0008	.0892

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 4			RUN 26			MACH 2.96			
BODY AXIS	AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
415	1.000	3.05	-4.07	-.0773	.0106	.0103	.0003	.0029	-.0211	.0006	.0003	.0008	.0009	.0131
416	1.001	3.03	-2.06	-.0352	.0105	.0084	.0001	.0032	-.0206	.0006	.0003	.0007	.0009	.0130
417	1.000	3.03	-1.10	-.0153	.0104	.0071	-.0000	.0032	-.0205	.0006	.0003	.0007	.0009	.0129
418	1.001	3.04	-.03	.0080	.0103	.0055	-.0001	.0030	-.0203	.0005	.0003	.0007	.0009	.0127
419	1.000	3.05	.93	.0290	.0101	.0040	-.0002	.0027	-.0201	.0005	.0003	.0007	.0009	.0125
420	1.000	3.06	1.92	.0503	.0099	.0026	-.0003	.0024	-.0200	.0005	.0003	.0007	.0009	.0123
421	1.000	3.07	2.96	.0730	.0096	.0011	-.0005	.0021	-.0201	.0005	.0003	.0007	.0009	.0120
422	1.000	3.07	3.94	.0950	.0094	.0000	-.0008	.0021	-.0204	.0005	.0003	.0007	.0009	.0117
423	1.000	3.07	4.96	.1170	.0092	-.0008	-.0012	.0022	-.0206	.0005	.0003	.0007	.0009	.0116
424	1.000	3.06	5.96	.1396	.0092	-.0015	-.0017	.0023	-.0204	.0005	.0003	.0007	.0009	.0116
425	1.001	3.06	7.91	.1829	.0091	-.0020	-.0024	.0022	-.0196	.0005	.0003	.0007	.0009	.0114
426	1.001	3.06	9.91	.2280	.0090	-.0014	-.0032	.0018	-.0180	.0005	.0003	.0007	.0009	.0114
427	1.000	3.07	11.93	.2751	.0092	-.0006	-.0038	.0012	-.0164	.0006	.0003	.0007	.0009	.0117
428	1.000	3.06	13.94	.3217	.0097	.0008	-.0046	.0011	-.0153	.0006	.0003	.0007	.0009	.0122

UPWT PROJECT 1239					BATCH 4			RUN 26			MACH 2.96			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
415	-4.7436	3.05	-4.07	-.0761	.0160	.0103	.0001	.0029	-.0211	.0006	.0003	.0008	.0009	.0185
416	-2.9443	3.03	-2.06	-.0347	.0118	.0084	-.0000	.0032	-.0206	.0006	.0003	.0007	.0009	.0142
417	-1.3955	3.03	-1.10	-.0150	.0107	.0071	-.0001	.0032	-.0205	.0006	.0003	.0007	.0009	.0132
418	.7773	3.04	-.03	.0080	.0103	.0055	-.0001	.0030	-.0203	.0005	.0003	.0007	.0009	.0127
419	2.7285	3.05	.93	.0288	.0106	.0040	-.0002	.0027	-.0201	.0005	.0003	.0007	.0009	.0130
420	4.3132	3.06	1.92	.0499	.0116	.0026	-.0002	.0024	-.0200	.0005	.0003	.0007	.0009	.0140
421	5.4009	3.07	2.96	.0723	.0134	.0011	-.0004	.0021	-.0201	.0005	.0003	.0007	.0009	.0158
422	5.9213	3.07	3.94	.0939	.0159	.0000	-.0006	.0021	-.0204	.0005	.0003	.0007	.0009	.0182
423	5.9841	3.07	4.96	.1155	.0193	-.0008	-.0010	.0023	-.0206	.0005	.0003	.0007	.0009	.0217
424	5.8200	3.06	5.96	.1376	.0236	-.0015	-.0014	.0025	-.0204	.0005	.0003	.0007	.0009	.0260
425	5.2553	3.06	7.91	.1796	.0342	-.0020	-.0021	.0025	-.0196	.0005	.0003	.0007	.0009	.0365
426	4.6283	3.06	9.91	.2225	.0481	-.0014	-.0028	.0023	-.0180	.0005	.0003	.0007	.0009	.0504
427	4.0447	3.07	11.93	.2666	.0659	-.0006	-.0034	.0019	-.0164	.0006	.0003	.0007	.0008	.0683
428	3.5594	3.06	13.94	.3091	.0869	.0008	-.0042	.0022	-.0153	.0006	.0003	.0007	.0008	.0893

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 4			RUN 30		MACH 3.30				
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
460	1.002	.01	-4.09	-.0712	.0096	.0089	-.0000	-.0004	.0001	.0004	.0003	.0007	.0008	.0117
461	1.000	.01	-2.12	-.0331	.0095	.0072	.0000	-.0004	.0002	.0004	.0003	.0006	.0008	.0116
462	1.001	.01	-1.12	-.0134	.0094	.0060	.0000	-.0004	.0002	.0004	.0003	.0006	.0008	.0115
463	1.001	.01	-.06	.0078	.0093	.0045	-.0000	-.0003	.0000	.0004	.0003	.0006	.0008	.0114
464	1.001	.01	.88	.0260	.0092	.0032	-.0000	-.0004	.0001	.0004	.0003	.0006	.0008	.0113
465	.999	.01	1.87	.0456	.0091	.0020	-.0000	-.0004	.0001	.0004	.0003	.0006	.0008	.0112
466	1.002	.01	2.85	.0649	.0090	.0009	-.0000	-.0004	.0001	.0004	.0003	.0006	.0008	.0110
467	1.003	.01	3.86	.0851	.0088	-.0001	-.0001	-.0004	.0000	.0004	.0003	.0006	.0008	.0109
468	1.001	.01	4.87	.1051	.0087	-.0009	-.0001	-.0003	-.0001	.0004	.0003	.0006	.0008	.0107
469	1.001	.01	5.86	.1249	.0086	-.0015	-.0001	-.0003	-.0001	.0004	.0003	.0005	.0008	.0106
470	1.002	.01	7.93	.1677	.0086	-.0022	-.0001	-.0003	-.0003	.0004	.0002	.0005	.0008	.0106
471	1.002	.01	9.94	.2101	.0088	-.0020	-.0001	-.0003	-.0002	.0004	.0003	.0005	.0008	.0108
472	1.002	.01	11.90	.2520	.0091	-.0010	-.0001	-.0003	-.0004	.0005	.0003	.0005	.0008	.0112
473	1.000	.01	13.95	.2970	.0097	.0002	.0000	-.0003	-.0003	.0005	.0003	.0006	.0008	.0118

UPWT PROJECT 1239				BATCH 4			RUN 30			MACH 3.30				
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
460	-4.7812	.01	-4.09	-.0701	.0147	.0089	.0000	-.0004	.0001	.0004	.0003	.0006	.0008	.0168
461	-3.0344	.01	-2.12	-.0326	.0107	.0072	.0000	-.0004	.0002	.0004	.0003	.0006	.0008	.0128
462	-1.3490	.01	-1.12	-.0131	.0097	.0060	.0000	-.0004	.0002	.0004	.0003	.0006	.0008	.0118
463	.8400	.01	-.06	.0078	.0093	.0045	-.0000	-.0003	.0000	.0004	.0003	.0006	.0008	.0114
464	2.6916	.01	.88	.0258	.0096	.0032	-.0000	-.0004	.0001	.0004	.0003	.0006	.0008	.0117
465	4.2688	.01	1.87	.0452	.0106	.0020	-.0000	-.0004	.0001	.0004	.0003	.0006	.0008	.0126
466	5.2706	.01	2.85	.0643	.0122	.0009	-.0001	-.0004	.0001	.0004	.0003	.0006	.0008	.0143
467	5.7880	.01	3.86	.0841	.0145	-.0001	-.0001	-.0004	.0000	.0004	.0003	.0006	.0008	.0166
468	5.9012	.01	4.87	.1038	.0176	-.0009	-.0001	-.0003	-.0001	.0004	.0003	.0006	.0008	.0196
469	5.7800	.01	5.86	.1231	.0213	-.0015	-.0001	-.0003	-.0001	.0004	.0002	.0005	.0008	.0233
470	5.1977	.01	7.93	.1646	.0317	-.0022	-.0001	-.0003	-.0003	.0004	.0002	.0005	.0008	.0336
471	4.5678	.01	9.94	.2050	.0449	-.0020	-.0001	-.0003	-.0002	.0004	.0003	.0005	.0008	.0469
472	4.0103	.01	11.90	.2441	.0609	-.0010	-.0001	-.0003	-.0004	.0004	.0003	.0005	.0008	.0629
473	3.5225	.01	13.95	.2852	.0910	.0002	-.0001	-.0003	-.0003	.0005	.0003	.0005	.0008	.0831

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TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 4				RUN 31		MACH 3.30				
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
475	1.000	3.06	-4.08	-.0714	.0099	.0088	.0006	.0019	-.0192	.0005	.0003	.0007	.0008	.0120
476	1.000	3.05	-2.09	-.0334	.0098	.0072	.0005	.0021	-.0188	.0005	.0003	.0006	.0008	.0120
477	1.001	3.04	-1.12	-.0149	.0097	.0061	.0005	.0021	-.0184	.0005	.0003	.0006	.0008	.0118
478	.999	3.05	-.15	.0043	.0096	.0049	.0005	.0019	-.0181	.0004	.0003	.0006	.0008	.0117
479	1.001	3.06	.94	.0255	.0094	.0035	.0004	.0015	-.0177	.0004	.0003	.0006	.0008	.0115
480	1.000	3.06	1.87	.0442	.0093	.0023	.0003	.0012	-.0177	.0004	.0003	.0006	.0008	.0114
481	1.000	3.07	2.87	.0641	.0091	.0012	.0001	.0011	-.0179	.0004	.0003	.0006	.0008	.0112
482	1.000	3.07	3.93	.0850	.0090	.0003	-.0001	.0013	-.0184	.0004	.0003	.0006	.0008	.0110
483	1.000	3.07	4.89	.1043	.0089	-.0005	-.0005	.0014	-.0189	.0004	.0003	.0006	.0008	.0110
484	1.001	3.06	5.94	.1257	.0089	-.0011	-.0009	.0016	-.0190	.0004	.0003	.0005	.0008	.0110
485	1.000	3.05	7.87	.1654	.0089	-.0014	-.0016	.0019	-.0187	.0004	.0002	.0005	.0008	.0109
486	1.001	3.05	9.89	.2084	.0090	-.0012	-.0024	.0018	-.0180	.0004	.0003	.0005	.0008	.0110
487	1.001	3.05	11.91	.2517	.0093	-.0006	-.0030	.0015	-.0173	.0005	.0003	.0005	.0008	.0114
488	.999	3.05	13.90	.2963	.0098	.0005	-.0038	.0014	-.0166	.0005	.0003	.0006	.0008	.0120

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UPWT PROJECT 1239				BATCH 4				RUN 31		MACH 3.30				
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
475	-4.7174	3.06	-4.08	-.0703	.0149	.0088	.0005	.0020	-.0192	.0005	.0003	.0006	.0008	.0171
476	-2.9772	3.05	-2.09	-.0329	.0110	.0072	.0034	.0021	-.0188	.0005	.0003	.0006	.0008	.0132
477	-1.4576	3.04	-1.12	-.0146	.0100	.0061	.0034	.0021	-.0184	.0005	.0003	.0006	.0008	.0121
478	.4477	3.05	-.15	.0043	.0096	.0049	.0005	.0019	-.0181	.0004	.0003	.0006	.0008	.0117
479	2.5653	3.06	.94	.0253	.0099	.0035	.0035	.0015	-.0177	.0004	.0003	.0006	.0008	.0120
480	4.0874	3.06	1.87	.0438	.0107	.0023	.0034	.0012	-.0177	.0004	.0003	.0006	.0008	.0128
481	5.1362	3.07	2.87	.0634	.0123	.0012	.0002	.0011	-.0179	.0004	.0003	.0006	.0008	.0144
482	5.6954	3.07	3.93	.0840	.0148	.0003	-.0000	.0013	-.0184	.0004	.0003	.0006	.0008	.0168
483	5.7817	3.07	4.89	.1029	.0178	-.0005	-.0004	.0015	-.0189	.0004	.0003	.0006	.0008	.0198
484	5.6579	3.06	5.94	.1239	.0219	-.0011	-.0008	.0017	-.0190	.0004	.0002	.0005	.0008	.0239
485	5.1517	3.05	7.87	.1623	.0315	-.0014	-.0013	.0021	-.0187	.0004	.0002	.0005	.0008	.0335
486	4.5520	3.05	9.89	.2033	.0447	-.0012	-.0020	.0022	-.0180	.0004	.0003	.0005	.0008	.0467
487	3.9923	3.05	11.91	.2438	.0511	-.0006	-.0027	.0021	-.0173	.0005	.0003	.0005	.0008	.0631
488	3.5272	3.05	13.90	.2846	.0907	.0005	-.0034	.0023	-.0166	.0005	.0003	.0005	.0008	.0828

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 5			RUN 32		MACH 2.30				
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
509	.997	.02	-4.18	-.0990	.0115	.0156	-.0000	-.0005	.0002	.0007	.0004	.0013	.0010	.0148
510	.997	.01	-2.22	-.0489	.0113	.0122	-.0001	-.0004	-.0000	.0007	.0004	.0012	.0010	.0147
511	.999	.01	-1.17	-.0223	.0111	.0100	-.0002	-.0003	-.0001	.0007	.0004	.0012	.0010	.0144
512	.996	.01	-.22	.0019	.0110	.0078	-.0002	-.0002	-.0004	.0007	.0004	.0012	.0010	.0143
513	1.000	.01	.85	.0287	.0107	.0054	-.0002	-.0003	-.0003	.0007	.0004	.0012	.0010	.0140
514	.999	.01	1.77	.0515	.0103	.0033	-.0002	-.0002	-.0005	.0007	.0004	.0012	.0010	.0136
515	.996	.01	2.80	.0791	.0097	.0009	-.0003	-.0001	-.0006	.0007	.0004	.0012	.0010	.0130
516	.999	.01	3.78	.1061	.0092	-.0010	-.0003	-.0001	-.0009	.0007	.0004	.0012	.0010	.0125
517	1.001	.01	4.80	.1325	.0086	-.0027	-.0003	.0000	-.0010	.0007	.0004	.0012	.0010	.0119
518	.992	.01	5.84	.1614	.0083	-.0041	-.0004	-.0001	-.0008	.0007	.0004	.0012	.0010	.0115
519	1.001	.02	7.83	.2129	.0085	-.0052	-.0002	-.0001	-.0014	.0007	.0004	.0011	.0010	.0118
520	.998	.02	9.87	.2656	.0085	-.0052	-.0003	.0001	-.0018	.0008	.0004	.0011	.0010	.0117
521	1.002	.02	11.78	.3158	.0086	-.0047	-.0004	.0001	-.0019	.0008	.0005	.0011	.0010	.0119
522	1.001	.01	13.86	.3699	.0088	-.0029	-.0004	.0003	-.0020	.0009	.0005	.0011	.0010	.0122

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UPWT PROJECT 1239					BATCH 5			RUN 32			MACH 2.30				
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
509	-5.2255	.02	-4.18	-.0976	.0187	.0156	.0000	-.0005	.0002	.0007	.0004	.0013	.0010	.0220	
510	-3.6463	.01	-2.22	-.0482	.0132	.0122	-.0001	-.0004	-.0000	.0007	.0004	.0012	.0010	.0165	
511	-1.8905	.01	-1.17	-.0219	.0116	.0100	-.0002	-.0003	-.0001	.0007	.0004	.0012	.0010	.0149	
512	.1813	.01	-.22	.0020	.0110	.0078	-.0002	-.0002	-.0004	.0007	.0004	.0012	.0010	.0143	
513	2.5595	.01	.85	.0285	.0111	.0054	-.0002	-.0003	-.0003	.0007	.0004	.0012	.0010	.0144	
514	4.2817	.01	1.77	.0510	.0119	.0033	-.0002	-.0002	-.0005	.0007	.0004	.0012	.0010	.0152	
515	5.7610	.01	2.80	.0784	.0136	.0009	-.0003	-.0001	-.0006	.0007	.0004	.0012	.0010	.0169	
516	6.4954	.01	3.78	.1051	.0162	-.0010	-.0003	-.0000	-.0009	.0007	.0004	.0012	.0010	.0195	
517	6.6665	.01	4.80	.1310	.0197	-.0027	-.0003	.0001	-.0010	.0007	.0004	.0012	.0010	.0229	
518	6.4691	.01	5.84	.1594	.0246	-.0041	-.0004	-.0001	-.0008	.0007	.0004	.0012	.0010	.0279	
519	5.5880	.02	7.83	.2092	.0374	-.0052	-.0002	-.0001	-.0014	.0007	.0004	.0011	.0010	.0407	
520	4.8184	.02	9.87	.2596	.0539	-.0052	-.0003	.0001	-.0018	.0007	.0004	.0011	.0010	.0571	
521	4.2101	.02	11.78	.3066	.0728	-.0047	-.0004	.0002	-.0019	.0008	.0004	.0011	.0009	.0761	
522	3.6677	.01	13.86	.3561	.0971	-.0029	-.0003	.0003	-.0020	.0009	.0005	.0010	.0009	.1004	

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 5			RUN 33			MACH 2.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
524	1.000	3.06	-4.19	-.0994	.0115	.0153	-.0003	.0036	-.0212	.0008	.0004	.0013	.0010	.0149
525	.996	3.04	-2.22	-.0491	.0114	.0119	-.0004	.0039	-.0210	.0008	.0004	.0012	.0010	.0148
526	.994	3.04	-1.18	-.0235	.0112	.0098	-.0009	.0039	-.0206	.0007	.0004	.0012	.0010	.0146
527	.997	3.04	-.24	.0004	.0110	.0078	-.0013	.0038	-.0204	.0007	.0004	.0012	.0010	.0144
528	1.000	3.05	.81	.0268	.0108	.0056	-.0017	.0037	-.0205	.0007	.0004	.0012	.0010	.0141
529	.995	3.05	1.86	.0541	.0103	.0033	-.0024	.0037	-.0210	.0007	.0004	.0012	.0010	.0136
530	.995	3.05	2.83	.0788	.0099	.0014	-.0027	.0038	-.0216	.0007	.0004	.0012	.0010	.0132
531	1.000	3.05	3.82	.1047	.0094	-.0004	-.0032	.0039	-.0220	.0007	.0004	.0012	.0010	.0127
532	.998	3.05	4.89	.1333	.0091	-.0020	-.0034	.0040	-.0219	.0008	.0004	.0012	.0010	.0124
533	.994	3.04	5.81	.1584	.0089	-.0030	-.0039	.0040	-.0212	.0008	.0004	.0012	.0010	.0122
534	.995	3.01	7.84	.2122	.0086	-.0040	-.0049	.0048	-.0206	.0008	.0004	.0011	.0010	.0119
535	.994	2.98	9.84	.2646	.0084	-.0042	-.0057	.0053	-.0201	.0008	.0004	.0011	.0010	.0117
536	.994	2.95	11.83	.3176	.0085	-.0036	-.0063	.0060	-.0195	.0008	.0005	.0011	.0010	.0118
537	.995	2.94	13.86	.3703	.0087	-.0020	-.0070	.0059	-.0177	.0009	.0005	.0011	.0010	.0121

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UPWT PROJECT 1239				BATCH 5			RUN 33			MACH 2.30				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
524	-5.2322	3.06	-4.19	-.0980	.0187	.0153	.0001	.0036	-.0212	.0008	.0004	.0013	.0010	.0221
525	-3.6444	3.04	-2.22	-.0484	.0133	.0119	-.0006	.0039	-.0210	.0008	.0004	.0012	.0010	.0167
526	-1.9729	3.04	-1.18	-.0231	.0117	.0098	-.0010	.0038	-.0206	.0007	.0004	.0012	.0010	.0151
527	.0421	3.04	-.24	.0005	.0110	.0078	-.0013	.0037	-.0204	.0007	.0004	.0012	.0010	.0144
528	2.3850	3.05	.81	.0266	.0112	.0056	-.0017	.0037	-.0205	.0007	.0004	.0012	.0010	.0145
529	4.4455	3.05	1.86	.0536	.0121	.0033	-.0022	.0038	-.0210	.0007	.0004	.0012	.0010	.0154
530	5.6720	3.05	2.83	.0781	.0138	.0014	-.0026	.0039	-.0216	.0007	.0004	.0012	.0010	.0171
531	6.3498	3.05	3.82	.1036	.0163	-.0004	-.0029	.0041	-.0220	.0007	.0004	.0012	.0010	.0196
532	6.4403	3.05	4.89	.1317	.0205	-.0020	-.0031	.0043	-.0219	.0007	.0004	.0012	.0010	.0238
533	6.2909	3.04	5.81	.1563	.0248	-.0030	-.0034	.0044	-.0212	.0008	.0004	.0012	.0010	.0281
534	5.5669	3.01	7.84	.2085	.0374	-.0040	-.0042	.0054	-.0206	.0008	.0004	.0011	.0010	.0407
535	4.8330	2.98	9.84	.2586	.0535	-.0042	-.0047	.0062	-.0201	.0008	.0004	.0011	.0010	.0568
536	4.1983	2.95	11.83	.3083	.0734	-.0036	-.0049	.0071	-.0195	.0008	.0004	.0011	.0009	.0767
537	3.6699	2.94	13.86	.3565	.0971	-.0020	-.0054	.0074	-.0177	.0009	.0005	.0010	.0009	.1005

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 5			RUN 34			MACH 2.96			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
539	1.013	-.01	-4.05	-.0774	.0102	.0107	-.0001	-.0004	.0002	.0005	.0003	.0008	.0009	.0126
540	1.013	-.01	-2.04	-.0343	.0101	.0086	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0125
541	1.013	-.01	-1.08	-.0134	.0100	.0072	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0124
542	1.013	-.01	-.04	.0090	.0098	.0055	-.0001	-.0002	-.0001	.0005	.0003	.0007	.0009	.0122
543	1.013	-.01	.97	.0307	.0096	.0039	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0120
544	1.012	-.01	1.97	.0523	.0095	.0023	-.0000	-.0002	-.0002	.0005	.0003	.0007	.0009	.0118
545	1.012	-.01	2.93	.0738	.0092	.0009	-.0001	-.0003	-.0002	.0005	.0003	.0007	.0009	.0116
546	1.012	-.01	3.92	.0949	.0090	-.0003	-.0001	-.0002	-.0004	.0005	.0003	.0007	.0009	.0114
547	1.012	-.01	4.96	.1170	.0087	-.0012	-.0000	-.0003	-.0005	.0005	.0003	.0007	.0009	.0111
548	1.012	-.01	5.94	.1398	.0085	-.0019	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0109
549	1.012	-.01	7.96	.1847	.0084	-.0027	-.0001	-.0001	-.0010	.0005	.0003	.0007	.0009	.0108
550	1.012	-.01	10.00	.2303	.0085	-.0021	-.0001	-.0001	-.0010	.0005	.0003	.0007	.0009	.0109
551	1.012	-.01	12.00	.2754	.0088	-.0008	-.0001	-.0001	-.0011	.0006	.0003	.0007	.0009	.0113
552	1.011	-.01	13.99	.3207	.0092	.0010	-.0001	-.0000	-.0014	.0006	.0003	.0007	.0009	.0117

APPENDIX A

UPWT PROJECT 1239				BATCH 5				RUN 34		MACH 2.96				
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
539	-4.8657	-.01	-4.05	-.0762	.0157	.0107	-.0001	-.0004	.0002	.0005	.0003	.0008	.0009	.0181
540	-2.9861	-.01	-2.04	-.0338	.0113	.0086	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0137
541	-1.2861	-.01	-1.08	-.0132	.0102	.0072	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0126
542	.9177	-.01	-.04	.0090	.0098	.0055	-.0001	-.0002	-.0001	.0005	.0003	.0007	.0009	.0122
543	3.0039	-.01	.97	.0305	.0101	.0039	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0125
544	4.6078	-.01	1.97	.0519	.0113	.0023	-.0000	-.0002	-.0002	.0005	.0003	.0007	.0009	.0136
545	5.6242	-.01	2.93	.0731	.0130	.0009	-.0001	-.0003	-.0002	.0005	.0003	.0007	.0009	.0154
546	6.0668	-.01	3.92	.0938	.0155	-.0003	-.0001	-.0002	-.0004	.0005	.0003	.0007	.0009	.0179
547	6.1611	-.01	4.96	.1156	.0188	-.0012	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0211
548	6.0172	-.01	5.94	.1379	.0229	-.0019	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0253
549	5.3443	-.01	7.96	.1813	.0339	-.0027	-.0001	-.0001	-.0010	.0005	.0003	.0007	.0009	.0362
550	4.6471	-.01	10.00	.2248	.0484	-.0021	-.0001	-.0001	-.0010	.0005	.0003	.0007	.0009	.0507
551	4.0528	-.01	12.00	.2670	.0659	-.0008	-.0001	-.0001	-.0011	.0006	.0003	.0007	.0008	.0683
552	3.5663	-.01	13.99	.3082	.0864	.0010	-.0001	.0000	-.0014	.0006	.0003	.0007	.0008	.0889

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 5				RUN 35				MACH 2.96			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
554	1.012	3.05	-4.04	-.0776	.0103	.0104	.0003	.0025	-.0192	.0005	.0003	.0008	.0009	.0128	
555	1.012	3.03	-2.09	-.0369	.0103	.0085	.0000	.0029	-.0192	.0005	.0003	.0007	.0009	.0127	
556	1.012	3.03	-1.06	-.0151	.0102	.0071	-.0001	.0029	-.0190	.0005	.0003	.0007	.0009	.0126	
557	1.012	3.03	-.05	.0068	.0100	.0057	-.0002	.0028	-.0188	.0005	.0003	.0007	.0009	.0124	
558	1.012	3.04	.98	.0290	.0098	.0041	-.0003	.0025	-.0188	.0005	.0003	.0007	.0009	.0122	
559	1.013	3.05	1.93	.0499	.0096	.0027	-.0004	.0022	-.0185	.0005	.0003	.0007	.0009	.0120	
560	1.011	3.06	2.94	.0714	.0093	.0013	-.0005	.0020	-.0186	.0005	.0003	.0007	.0009	.0117	
561	1.012	3.06	3.99	.0945	.0091	.0002	-.0008	.0020	-.0191	.0005	.0003	.0007	.0009	.0115	
562	1.016	3.06	4.94	.1158	.0089	-.0007	-.0012	.0021	-.0194	.0005	.0003	.0007	.0009	.0113	
563	1.016	3.06	6.00	.1389	.0089	-.0014	-.0017	.0023	-.0193	.0005	.0003	.0007	.0009	.0113	
564	1.015	3.05	7.99	.1836	.0087	-.0017	-.0024	.0022	-.0186	.0005	.0003	.0007	.0009	.0111	
565	1.015	3.05	9.97	.2278	.0086	-.0011	-.0032	.0019	-.0172	.0006	.0003	.0007	.0009	.0111	
566	1.015	3.05	11.91	.2726	.0088	-.0003	-.0038	.0015	-.0160	.0006	.0003	.0007	.0009	.0113	
567	1.015	3.05	13.94	.3194	.0092	.0013	-.0045	.0014	-.0150	.0007	.0003	.0007	.0009	.0117	

UPWT PROJECT 1239				BATCH 5				RUN 35				MACH 2.96			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
554	-4.8517	3.05	-4.04	-.0764	.0158	.0104	.0001	.0025	-.0192	.0005	.0003	.0008	.0009	.0182	
555	-3.1311	3.03	-2.09	-.0364	.0116	.0085	-.0001	.0029	-.0192	.0005	.0003	.0007	.0009	.0140	
556	-1.4214	3.03	-1.06	-.0149	.0105	.0071	-.0001	.0029	-.0190	.0005	.0003	.0007	.0009	.0129	
557	.6777	3.03	-.05	.0068	.0100	.0057	-.0002	.0028	-.0188	.0005	.0003	.0007	.0009	.0124	
558	2.7968	3.04	.98	.0288	.0103	.0041	-.0002	.0025	-.0188	.0005	.0003	.0007	.0009	.0127	
559	4.3867	3.05	1.93	.0494	.0113	.0027	-.0003	.0022	-.0185	.0005	.0003	.0007	.0009	.0137	
560	5.4412	3.06	2.94	.0707	.0130	.0013	-.0004	.0020	-.0186	.0005	.0003	.0007	.0009	.0154	
561	5.9864	3.06	3.99	.0934	.0156	.0002	-.0006	.0020	-.0191	.0005	.0003	.0007	.0009	.0180	
562	6.0641	3.06	4.94	.1144	.0189	-.0007	-.0010	.0022	-.0194	.0005	.0003	.0007	.0009	.0212	
563	5.8629	3.06	6.00	.1369	.0234	-.0014	-.0014	.0024	-.0193	.0005	.0003	.0007	.0009	.0257	
564	5.2760	3.05	7.99	.1802	.0341	-.0017	-.0021	.0026	-.0186	.0005	.0003	.0007	.0009	.0365	
565	4.6367	3.05	9.97	.2223	.0480	-.0011	-.0028	.0025	-.0172	.0006	.0003	.0007	.0009	.0503	
566	4.0727	3.05	11.91	.2643	.0649	-.0003	-.0034	.0022	-.0160	.0006	.0003	.0007	.0008	.0673	
567	3.5777	3.05	13.94	.3070	.0858	.0013	-.0041	.0025	-.0150	.0006	.0003	.0007	.0008	.0883	

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 6				RUN 36			MACH 2.96			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
573	.999	.01	-4.03	-.0794	.0101	.0117	-.0001	-.0004	.0002	.0005	.0003	.0008	.0009	.0126
574	.999	.01	-2.06	-.0359	.0101	.0088	-.0001	-.0003	.0001	.0005	.0003	.0007	.0009	.0124
575	.999	.01	-1.08	-.0143	.0100	.0070	-.0001	-.0003	.0000	.0005	.0003	.0007	.0009	.0123
576	.998	.01	-.08	.0081	.0098	.0050	-.0001	-.0003	-.0001	.0005	.0003	.0007	.0009	.0122
577	1.002	.01	.94	.0306	.0097	.0030	-.0001	-.0003	.0000	.0005	.0003	.0007	.0009	.0120
578	1.000	.01	1.92	.0528	.0095	.0011	-.0000	-.0004	-.0000	.0005	.0003	.0007	.0009	.0119
579	1.001	.01	2.95	.0749	.0093	-.0006	-.0001	-.0003	-.0002	.0005	.0003	.0007	.0009	.0117
580	1.001	.01	3.91	.0962	.0091	-.0019	-.0001	-.0003	-.0002	.0005	.0003	.0007	.0009	.0115
581	1.001	.01	4.96	.1194	.0088	-.0030	-.0001	-.0003	-.0004	.0005	.0003	.0007	.0009	.0112
582	1.001	.01	5.95	.1413	.0086	-.0037	-.0001	-.0003	-.0005	.0005	.0003	.0007	.0009	.0110
583	1.001	.02	8.02	.1880	.0086	-.0045	-.0000	-.0002	-.0008	.0005	.0003	.0007	.0009	.0109
584	1.001	.01	10.02	.2333	.0087	-.0040	-.0001	-.0002	-.0008	.0005	.0003	.0007	.0009	.0111
585	1.001	.01	11.96	.2767	.0089	-.0026	-.0001	-.0002	-.0011	.0006	.0003	.0007	.0009	.0114
586	1.001	.01	13.93	.3214	.0092	-.0008	-.0002	-.0001	-.0013	.0006	.0003	.0007	.0009	.0118

UPWT PROJECT 1239				BATCH 6				RUN 36				MACH 2.96			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
573	-4.9864	.01	-4.03	-.0783	.0157	.0117	-.0001	-.0004	.0002	.0005	.0003	.0008	.0009	.0181	
574	-3.1216	.01	-2.06	-.0354	.0113	.0088	-.0001	-.0003	.0001	.0005	.0003	.0007	.0009	.0137	
575	-1.3718	.01	-1.08	-.0141	.0102	.0070	-.0001	-.0003	.0000	.0005	.0003	.0007	.0009	.0126	
576	.8316	.01	-.08	.0082	.0098	.0050	-.0001	-.0003	-.0001	.0005	.0003	.0007	.0009	.0122	
577	2.9927	.01	.94	.0305	.0102	.0030	-.0001	-.0003	.0000	.0005	.0003	.0007	.0009	.0125	
578	4.6467	.01	1.92	.0524	.0113	.0011	-.0001	-.0004	-.0000	.0005	.0003	.0007	.0009	.0136	
579	5.6337	.01	2.95	.0742	.0132	-.0006	-.0001	-.0003	-.0002	.0005	.0003	.0007	.0009	.0156	
580	6.0863	.01	3.91	.0952	.0156	-.0019	-.0001	-.0003	-.0002	.0005	.0003	.0007	.0009	.0180	
581	6.1731	.01	4.96	.1179	.0191	-.0030	-.0001	-.0003	-.0004	.0005	.0003	.0007	.0009	.0215	
582	6.0041	.01	5.95	.1394	.0232	-.0037	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0256	
583	5.3178	.02	8.02	.1846	.0347	-.0045	-.0001	-.0002	-.0008	.0005	.0003	.0007	.0009	.0370	
584	4.6347	.01	10.02	.2277	.0491	-.0040	-.0001	-.0002	-.0008	.0005	.0003	.0007	.0009	.0515	
585	4.0600	.01	11.96	.2682	.0661	-.0026	-.0001	-.0002	-.0011	.0006	.0003	.0007	.0008	.0685	
586	3.5796	.01	13.93	.3090	.0863	-.0008	-.0002	-.0001	-.0013	.0006	.0003	.0007	.0008	.0888	

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 6			RUN 37			MACH 2.96			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
588	1.001	3.06	-4.07	-.0820	.0102	.0115	-.0005	.0019	-.0185	.0006	.0003	.0008	.0009	.0127
589	1.001	3.04	-2.01	-.0367	.0102	.0088	-.0006	.0023	-.0181	.0005	.0003	.0007	.0009	.0127
590	1.001	3.04	-1.11	-.0172	.0102	.0072	-.0007	.0023	-.0181	.0005	.0003	.0007	.0009	.0126
591	1.002	3.05	-.04	.0065	.0101	.0053	-.0008	.0022	-.0179	.0005	.0003	.0007	.0009	.0125
592	1.001	3.05	.93	.0282	.0099	.0035	-.0008	.0020	-.0179	.0005	.0003	.0007	.0009	.0123
593	1.001	3.06	1.92	.0500	.0097	.0017	-.0008	.0017	-.0178	.0005	.0003	.0007	.0009	.0121
594	1.002	3.07	2.94	.0727	.0094	.0001	-.0009	.0015	-.0181	.0005	.0003	.0007	.0009	.0118
595	1.000	3.07	3.94	.0954	.0092	-.0013	-.0012	.0015	-.0184	.0005	.0003	.0007	.0009	.0116
596	1.001	3.07	4.94	.1172	.0090	-.0023	-.0016	.0017	-.0188	.0005	.0003	.0007	.0009	.0114
597	1.002	3.06	5.96	.1405	.0090	-.0030	-.0021	.0018	-.0188	.0005	.0003	.0007	.0009	.0114
598	1.001	3.06	7.98	.1855	.0089	-.0035	-.0028	.0019	-.0182	.0005	.0003	.0007	.0009	.0113
599	1.002	3.05	9.93	.2293	.0088	-.0030	-.0036	.0017	-.0168	.0006	.0003	.0007	.0009	.0112
600	1.001	3.06	11.92	.2753	.0090	-.0021	-.0043	.0013	-.0158	.0006	.0003	.0007	.0009	.0115
601	1.002	3.05	14.02	.3240	.0094	-.0004	-.0052	.0012	-.0147	.0007	.0003	.0007	.0009	.0119

UPWT PROJECT 1239					BATCH 6			RUN 37			MACH 2.96				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
588	-5.0421	3.06	-4.07	-.0808	.0160	.0115	-.0006	.0019	-.0185	.0005	.0003	.0008	.0009	.0185	
589	-3.1473	3.04	-2.01	-.0362	.0115	.0088	-.0007	.0022	-.0181	.0005	.0003	.0007	.0009	.0139	
590	-1.6071	3.04	-1.11	-.0169	.0105	.0072	-.0007	.0023	-.0181	.0005	.0003	.0007	.0009	.0129	
591	.6475	3.05	-.04	.0065	.0101	.0053	-.0008	.0022	-.0179	.0005	.0003	.0007	.0009	.0125	
592	2.7033	3.05	.93	.0280	.0103	.0035	-.0007	.0020	-.0179	.0005	.0003	.0007	.0009	.0127	
593	4.3628	3.06	1.92	.0495	.0113	.0017	-.0007	.0017	-.0178	.0005	.0003	.0007	.0009	.0137	
594	5.4820	3.07	2.94	.0719	.0131	.0001	-.0009	.0015	-.0181	.0005	.0003	.0007	.0009	.0155	
595	6.0091	3.07	3.94	.0943	.0157	-.0013	-.0010	.0016	-.0184	.0005	.0003	.0007	.0009	.0181	
596	6.0630	3.07	4.94	.1158	.0191	-.0023	-.0014	.0018	-.0188	.0005	.0003	.0007	.0009	.0215	
597	5.8856	3.06	5.96	.1385	.0235	-.0030	-.0019	.0020	-.0188	.0005	.0003	.0007	.0009	.0259	
598	5.2712	3.06	7.98	.1820	.0345	-.0035	-.0025	.0023	-.0182	.0005	.0003	.0007	.0009	.0369	
599	4.6429	3.05	9.93	.2239	.0482	-.0030	-.0033	.0023	-.0168	.0006	.0003	.0007	.0009	.0506	
600	4.0639	3.06	11.92	.2669	.0657	-.0021	-.0039	.0022	-.0158	.0006	.0003	.0007	.0008	.0681	
601	3.5549	3.05	14.02	.3114	.0876	-.0004	-.0047	.0024	-.0147	.0006	.0003	.0007	.0008	.0901	

TABLE AIII.- Continued

UPWT PROJECT 1239

BATCH 6

RUN 38

MACH 2.30

BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW

PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
603	.999	-.00	-4.20	-.1014	.0113	.0168	.0000	-.0006	.0006	.0007	.0004	.0013	.0010	.0147
604	.996	-.00	-2.19	-.0483	.0112	.0124	-.0001	-.0004	.0001	.0007	.0004	.0012	.0010	.0145
605	.996	-.00	-1.17	-.0221	.0111	.0098	-.0002	-.0004	-.0001	.0007	.0004	.0012	.0010	.0144
606	.995	-.00	-.21	.0028	.0109	.0072	-.0003	-.0003	-.0002	.0007	.0004	.0012	.0010	.0142
607	.996	-.01	.81	.0295	.0106	.0044	-.0003	-.0003	-.0001	.0007	.0004	.0012	.0010	.0140
608	.996	-.01	1.83	.0555	.0103	.0018	-.0002	-.0002	-.0004	.0007	.0004	.0012	.0010	.0136
609	.998	-.01	2.82	.0820	.0097	-.0007	-.0003	-.0002	-.0007	.0007	.0004	.0012	.0010	.0130
610	.997	-.01	3.85	.1095	.0092	-.0032	-.0003	-.0001	-.0007	.0007	.0004	.0012	.0010	.0125
611	.996	-.01	4.79	.1353	.0086	-.0050	-.0004	-.0000	-.0010	.0007	.0004	.0012	.0010	.0119
612	.996	-.00	5.86	.1637	.0082	-.0062	-.0003	-.0002	-.0007	.0007	.0004	.0012	.0010	.0115
613	.997	.00	7.79	.2138	.0085	-.0071	-.0002	-.0002	-.0013	.0007	.0004	.0011	.0010	.0117
614	.998	-.00	9.82	.2670	.0085	-.0070	-.0003	.0000	-.0016	.0008	.0004	.0011	.0010	.0117
615	.996	-.00	11.82	.3195	.0085	-.0065	-.0003	-.0000	-.0016	.0008	.0005	.0011	.0010	.0118
616	.997	-.01	13.81	.3708	.0088	-.0047	-.0005	.0001	-.0018	.0009	.0005	.0011	.0010	.0122

UPWT PROJECT 1239

BATCH 6

RUN 38

MACH 2.30

STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
603	-5.3387	-.00	-4.20	-.0999	.0187	.0168	.0001	-.0006	.0006	.0007	.0004	.0013	.0010	.0221
604	-3.6482	-.00	-2.19	-.0476	.0131	.0124	-.0001	-.0004	.0001	.0007	.0004	.0012	.0010	.0164
605	-1.8894	-.00	-1.17	-.0217	.0115	.0098	-.0002	-.0004	-.0001	.0007	.0004	.0012	.0010	.0148
606	.2634	-.00	-.21	.0029	.0109	.0072	-.0003	-.0003	-.0002	.0007	.0004	.0012	.0010	.0142
607	2.6548	-.01	.81	.0294	.0111	.0044	-.0003	-.0003	-.0001	.0007	.0004	.0012	.0010	.0144
608	4.5732	-.01	1.83	.0551	.0120	.0018	-.0002	-.0002	-.0004	.0007	.0004	.0012	.0010	.0154
609	5.9040	-.01	2.82	.0812	.0138	-.0007	-.0003	-.0001	-.0007	.0007	.0004	.0012	.0010	.0171
610	6.5726	-.01	3.85	.1084	.0165	-.0032	-.0003	-.0001	-.0007	.0007	.0004	.0012	.0010	.0198
611	6.7371	-.01	4.79	.1338	.0199	-.0050	-.0004	.0000	-.0010	.0007	.0004	.0012	.0010	.0231
612	6.5011	-.00	5.86	.1616	.0249	-.0062	-.0003	-.0002	-.0007	.0007	.0004	.0012	.0010	.0281
613	5.6202	.00	7.79	.2101	.0374	-.0071	-.0003	-.0002	-.0013	.0007	.0004	.0011	.0010	.0406
614	4.8456	-.00	9.82	.2610	.0539	-.0070	-.0003	.0001	-.0016	.0007	.0004	.0011	.0010	.0571
615	4.2034	-.00	11.82	.3101	.0738	-.0065	-.0003	.0000	-.0016	.0008	.0004	.0011	.0009	.0770
616	3.6813	-.01	13.81	.3570	.0970	-.0047	-.0004	.0003	-.0018	.0009	.0005	.0010	.0009	.1003

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 6			RUN 39			MACH 2.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
618	.998	3.05	-4.17	-.1008	.0113	.0162	-.0006	.0030	-.0203	.0008	.0004	.0013	.0010	.0148
619	.997	3.03	-2.18	-.0480	.0113	.0120	-.0014	.0034	-.0199	.0008	.0004	.0012	.0010	.0147
620	.997	3.03	-1.26	-.0257	.0112	.0098	-.0016	.0033	-.0198	.0008	.0004	.0012	.0010	.0146
621	.998	3.03	-.20	.0022	.0110	.0071	-.0021	.0033	-.0196	.0008	.0004	.0012	.0010	.0143
622	.997	3.04	.81	.0274	.0108	.0047	-.0025	.0033	-.0200	.0008	.0004	.0012	.0010	.0141
623	.998	3.04	1.77	.0538	.0104	.0020	-.0032	.0034	-.0204	.0007	.0004	.0012	.0010	.0137
624	.998	3.04	2.80	.0804	.0099	-.0002	-.0035	.0034	-.0209	.0007	.0004	.0012	.0010	.0132
625	.997	3.05	3.78	.1063	.0094	-.0022	-.0038	.0034	-.0213	.0008	.0004	.0012	.0010	.0128
626	.997	3.04	4.81	.1350	.0092	-.0042	-.0042	.0036	-.0212	.0008	.0004	.0012	.0010	.0125
627	.997	3.03	5.83	.1618	.0089	-.0052	-.0046	.0037	-.0207	.0008	.0004	.0012	.0010	.0123
628	.996	3.00	7.79	.2133	.0086	-.0061	-.0056	.0041	-.0196	.0008	.0004	.0011	.0010	.0119
629	.997	2.98	9.77	.2658	.0085	-.0062	-.0063	.0045	-.0188	.0008	.0004	.0011	.0010	.0118
630	.997	2.95	11.82	.3194	.0085	-.0053	-.0071	.0051	-.0180	.0008	.0005	.0011	.0010	.0118
631	.997	2.94	13.82	.3714	.0087	-.0036	-.0078	.0049	-.0163	.0009	.0005	.0011	.0010	.0121

UPWT PROJECT 1239					BATCH 6			RUN 39			MACH 2.30			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
618	-5.3312	3.05	-4.17	-.0993	.0186	.0162	-.0009	.0030	-.0203	.0008	.0004	.0013	.0010	.0220
619	-3.6110	3.03	-2.18	-.0474	.0131	.0120	-.0015	.0033	-.0199	.0008	.0004	.0012	.0010	.0165
620	-2.1556	3.03	-1.26	-.0253	.0118	.0098	-.0017	.0033	-.0198	.0008	.0004	.0012	.0010	.0151
621	.2088	3.03	-.20	.0023	.0110	.0071	-.0021	.0033	-.0196	.0008	.0004	.0012	.0010	.0143
622	2.4423	3.04	.81	.0272	.0111	.0047	-.0025	.0033	-.0200	.0008	.0004	.0012	.0010	.0145
623	4.4251	3.04	1.77	.0533	.0120	.0020	-.0031	.0035	-.0204	.0007	.0004	.0012	.0010	.0154
624	5.7618	3.04	2.80	.0796	.0138	-.0002	-.0034	.0035	-.0209	.0007	.0004	.0012	.0010	.0171
625	6.4003	3.05	3.78	.1052	.0164	-.0022	-.0036	.0036	-.0213	.0008	.0004	.0012	.0010	.0197
626	6.5219	3.04	4.81	.1334	.0205	-.0042	-.0039	.0039	-.0212	.0008	.0004	.0012	.0010	.0238
627	6.3049	3.03	5.83	.1597	.0253	-.0052	-.0042	.0042	-.0207	.0008	.0004	.0012	.0010	.0286
628	5.5984	3.00	7.79	.2096	.0374	-.0061	-.0050	.0049	-.0196	.0008	.0004	.0011	.0010	.0407
629	4.8614	2.98	9.77	.2596	.0534	-.0062	-.0055	.0055	-.0188	.0008	.0004	.0011	.0010	.0567
630	4.2053	2.95	11.82	.3100	.0737	-.0053	-.0059	.0064	-.0180	.0008	.0004	.0011	.0009	.0770
631	3.6827	2.94	13.82	.3576	.0971	-.0036	-.0064	.0066	-.0163	.0009	.0005	.0010	.0009	.1004

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 7			RUN 40			MACH 2.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
637	.997	-.01	-4.17	-.1046	.0120	.0187	-.0000	-.0002	-.0003	.0007	.0004	.0013	.0010	.0154
638	.998	-.01	-2.18	-.0511	.0116	.0143	-.0002	-.0001	-.0004	.0007	.0004	.0012	.0010	.0149
639	.997	-.01	-1.19	-.0260	.0114	.0118	-.0002	-.0001	-.0005	.0007	.0004	.0012	.0010	.0147
640	.998	-.01	-.19	.0009	.0111	.0089	-.0004	.0000	-.0007	.0007	.0004	.0012	.0010	.0144
641	.998	-.01	.83	.0272	.0106	.0060	-.0004	-.0000	-.0007	.0007	.0004	.0012	.0010	.0139
642	.998	-.01	1.31	.0526	.0101	.0036	-.0004	.0001	-.0009	.0007	.0004	.0012	.0010	.0134
643	.998	-.01	2.86	.0804	.0095	.0008	-.0005	.0001	-.0010	.0007	.0004	.0012	.0010	.0128
644	.998	-.01	3.84	.1064	.0088	-.0015	-.0005	.0002	-.0013	.0007	.0004	.0012	.0010	.0121
645	.998	-.02	4.82	.1335	.0081	-.0034	-.0006	.0003	-.0013	.0007	.0004	.0012	.0010	.0114
646	.999	-.01	5.87	.1609	.0078	-.0046	-.0004	.0001	-.0011	.0007	.0004	.0012	.0010	.0110
647	.998	-.01	7.83	.2127	.0082	-.0054	-.0004	.0002	-.0017	.0007	.0004	.0011	.0010	.0114
648	.998	-.01	9.91	.2673	.0081	-.0053	-.0005	.0003	-.0022	.0008	.0004	.0011	.0010	.0114
649	.998	-.01	11.82	.3153	.0082	-.0046	-.0005	.0003	-.0022	.0008	.0005	.0011	.0010	.0115
650	.999	-.01	13.76	.3658	.0083	-.0029	-.0006	.0005	-.0023	.0009	.0005	.0011	.0010	.0117

UPWT PROJECT 1239					BATCH 7			RUN 40			MACH 2.30			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
637	-5.2629	-.01	-4.17	-.1031	.0196	.0187	.0000	-.0002	-.0003	.0007	.0004	.0013	.0010	.0229
638	-3.7212	-.01	-2.18	-.0504	.0136	.0143	-.0002	-.0001	-.0004	.0007	.0004	.0012	.0010	.0169
639	-2.1485	-.01	-1.19	-.0256	.0119	.0118	-.0002	-.0001	-.0005	.0007	.0004	.0012	.0010	.0152
640	.0853	-.01	-.19	.0009	.0111	.0089	-.0004	.0000	-.0007	.0007	.0004	.0012	.0010	.0144
641	2.4516	-.01	.83	.0270	.0110	.0060	-.0004	-.0000	-.0007	.0007	.0004	.0012	.0010	.0143
642	4.4258	-.01	1.81	.0522	.0118	.0036	-.0004	.0001	-.0009	.0007	.0004	.0012	.0010	.0151
643	5.9076	-.01	2.86	.0796	.0135	.0008	-.0005	.0001	-.0010	.0007	.0004	.0012	.0010	.0168
644	6.6263	-.01	3.84	.1054	.0159	-.0015	-.0005	.0002	-.0013	.0007	.0004	.0012	.0010	.0192
645	6.8339	-.02	4.82	.1321	.0193	-.0034	-.0005	.0003	-.0013	.0007	.0004	.0012	.0010	.0226
646	6.5633	-.01	5.87	.1588	.0242	-.0046	-.0004	.0001	-.0011	.0007	.0004	.0012	.0010	.0274
647	5.6439	-.01	7.83	.2091	.0370	-.0054	-.0004	.0002	-.0017	.0007	.0004	.0011	.0010	.0403
648	4.8393	-.01	9.91	.2612	.0540	-.0053	-.0005	.0004	-.0022	.0007	.0004	.0011	.0009	.0572
649	4.2180	-.01	11.82	.3061	.0726	-.0046	-.0004	.0004	-.0022	.0008	.0004	.0011	.0009	.0758
650	3.7053	-.01	13.76	.3524	.0951	-.0029	-.0004	.0006	-.0023	.0009	.0005	.0010	.0009	.0984

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 7			RUN 41			MACH 2.96			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
652	1.000	-.01	-4.05	-.0820	.0107	.0134	-.0001	-.0002	.0000	.0005	.0003	.0008	.0009	.0131
653	1.000	-.01	-2.11	-.0388	.0104	.0105	-.0002	-.0001	-.0002	.0005	.0003	.0007	.0009	.0128
654	1.000	-.02	-1.07	-.0151	.0101	.0085	-.0002	-.0001	-.0002	.0005	.0003	.0007	.0009	.0125
655	1.000	-.01	-.06	.0068	.0099	.0065	-.0001	-.0001	-.0001	.0005	.0003	.0007	.0009	.0122
656	1.000	-.01	.98	.0303	.0096	.0043	-.0002	-.0001	-.0002	.0005	.0003	.0007	.0009	.0120
657	1.000	-.01	1.93	.0512	.0094	.0024	-.0002	-.0002	-.0001	.0005	.0003	.0007	.0009	.0117
658	1.000	-.01	2.96	.0744	.0091	.0006	-.0002	-.0002	-.0002	.0005	.0003	.0007	.0009	.0115
659	1.000	-.01	3.93	.0958	.0087	-.0008	-.0002	-.0002	-.0002	.0005	.0003	.0007	.0009	.0111
660	1.001	-.01	4.94	.1184	.0084	-.0018	-.0002	-.0001	-.0004	.0005	.0003	.0007	.0009	.0108
661	1.000	-.01	5.93	.1400	.0082	-.0025	-.0002	-.0001	-.0004	.0005	.0003	.0007	.0009	.0106
662	1.000	-.01	8.03	.1873	.0081	-.0033	-.0002	-.0000	-.0008	.0005	.0003	.0007	.0009	.0104
663	1.000	-.01	9.94	.2289	.0082	-.0027	-.0002	.0000	-.0010	.0005	.0003	.0007	.0009	.0106
664	1.000	-.01	11.97	.2750	.0084	-.0014	-.0002	.0000	-.0012	.0006	.0003	.0007	.0009	.0109
665	1.001	-.01	13.96	.3204	.0088	.0005	-.0002	.0001	-.0015	.0006	.0003	.0007	.0009	.0113

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UPWT PROJECT 1239					BATCH 7			RUN 41			MACH 2.96			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
652	-4.9040	-.01	-4.05	-.0808	.0165	.0134	-.0001	-.0002	.0000	.0005	.0003	.0008	.0009	.0189
653	-3.2425	-.01	-2.11	-.0382	.0118	.0105	-.0002	-.0001	-.0002	.0005	.0003	.0007	.0009	.0142
654	-1.4249	-.02	-1.07	-.0149	.0104	.0085	-.0002	-.0001	-.0002	.0005	.0003	.0007	.0009	.0128
655	.6924	-.01	-.06	.0068	.0099	.0065	-.0001	-.0001	-.0001	.0005	.0003	.0007	.0009	.0122
656	2.9725	-.01	.98	.0301	.0101	.0043	-.0002	-.0001	-.0002	.0005	.0003	.0007	.0009	.0125
657	4.5848	-.01	1.93	.0508	.0111	.0024	-.0002	-.0002	-.0001	.0005	.0003	.0007	.0009	.0134
658	5.7198	-.01	2.96	.0737	.0129	.0006	-.0002	-.0002	-.0002	.0005	.0003	.0007	.0009	.0153
659	6.2110	-.01	3.93	.0948	.0153	-.0008	-.0002	-.0001	-.0002	.0005	.0003	.0007	.0009	.0177
660	6.3100	-.01	4.94	.1170	.0185	-.0018	-.0002	-.0001	-.0004	.0005	.0003	.0007	.0009	.0209
661	6.1154	-.01	5.93	.1381	.0226	-.0025	-.0002	-.0001	-.0004	.0005	.0003	.0007	.0009	.0250
662	5.3829	-.01	8.03	.1839	.0342	-.0033	-.0002	.0000	-.0008	.0005	.0003	.0007	.0009	.0365
663	4.7024	-.01	9.94	.2235	.0475	-.0027	-.0001	.0001	-.0010	.0005	.0003	.0007	.0009	.0499
664	4.0865	-.01	11.97	.2667	.0653	-.0014	-.0002	.0001	-.0012	.0006	.0003	.0007	.0008	.0677
665	3.5921	-.01	13.96	.3081	.0858	.0005	-.0002	.0002	-.0015	.0006	.0003	.0007	.0008	.0882

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 8				RUN 42				MACH 2.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
670	.997	-.01	-4.18	-.1067	.0125	.0204	-.0001	-.0001	-.0005	.0007	.0004	.0013	.0010	.0158	
671	.998	-.01	-2.26	-.0561	.0120	.0161	-.0003	.0000	-.0006	.0007	.0004	.0012	.0010	.0154	
672	.998	-.01	-1.19	-.0284	.0117	.0134	-.0003	.0000	-.0007	.0007	.0004	.0012	.0010	.0150	
673	.998	-.01	-.25	-.0049	.0114	.0108	-.0002	-.0000	-.0006	.0007	.0004	.0012	.0010	.0147	
674	.998	-.01	.80	.0240	.0109	.0077	-.0005	.0001	-.0009	.0007	.0004	.0012	.0010	.0142	
675	.999	-.01	1.82	.0502	.0103	.0050	-.0004	.0001	-.0010	.0007	.0004	.0012	.0010	.0136	
676	.999	-.01	2.81	.0763	.0096	.0025	-.0004	.0001	-.0009	.0007	.0004	.0012	.0010	.0129	
677	.999	-.01	3.82	.1027	.0090	.0001	-.0004	.0001	-.0010	.0007	.0004	.0012	.0010	.0122	
678	.998	-.01	4.79	.1305	.0082	-.0020	-.0005	.0001	-.0012	.0007	.0004	.0012	.0010	.0115	
679	1.000	-.01	4.78	.1293	.0082	-.0020	-.0006	.0002	-.0014	.0007	.0004	.0012	.0010	.0115	
680	1.000	-.01	5.81	.1576	.0077	-.0033	-.0004	.0000	-.0012	.0007	.0004	.0012	.0010	.0110	
681	.999	-.01	7.82	.2099	.0080	-.0042	-.0004	.0001	-.0016	.0007	.0004	.0011	.0010	.0113	
682	1.000	-.01	9.82	.2618	.0079	-.0041	-.0005	.0003	-.0021	.0008	.0004	.0011	.0010	.0112	
683	1.000	-.01	11.84	.3143	.0080	-.0032	-.0006	.0003	-.0022	.0008	.0005	.0011	.0010	.0113	
684	1.000	-.01	13.84	.3660	.0081	-.0013	-.0006	.0005	-.0024	.0009	.0005	.0011	.0010	.0115	

UPWT PROJECT 1239				BATCH 8				RUN 42				MACH 2.30			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
670	-5.2008	-.01	-4.18	-.1051	.0202	.0204	-.0001	-.0001	-.0005	.0007	.0004	.0013	.0010	.0236	
671	-3.8904	-.01	-2.26	-.0554	.0142	.0161	-.0003	-.0000	-.0006	.0007	.0004	.0012	.0010	.0176	
672	-2.2831	-.01	-1.19	-.0280	.0123	.0134	-.0003	.0000	-.0007	.0007	.0004	.0012	.0010	.0156	
673	-.4245	-.01	-.25	-.0048	.0114	.0108	-.0002	-.0000	-.0006	.0007	.0004	.0012	.0010	.0147	
674	2.1284	-.01	.80	.0238	.0112	.0077	-.0005	.0001	-.0009	.0007	.0004	.0012	.0010	.0145	
675	4.1808	-.01	1.82	.0497	.0119	.0050	-.0004	.0001	-.0010	.0007	.0004	.0012	.0010	.0152	
676	5.6511	-.01	2.81	.0756	.0134	.0025	-.0004	.0001	-.0009	.0007	.0004	.0012	.0010	.0167	
677	6.4484	-.01	3.82	.1016	.0158	.0001	-.0004	.0001	-.0010	.0007	.0004	.0012	.0010	.0190	
678	6.7631	-.01	4.79	.1291	.0191	-.0020	-.0005	.0002	-.0012	.0007	.0004	.0012	.0010	.0223	
679	6.7424	-.01	4.78	.1278	.0190	-.0020	-.0005	.0002	-.0014	.0007	.0004	.0012	.0010	.0222	
680	6.5772	-.01	5.81	.1556	.0237	-.0033	-.0004	.0001	-.0012	.0007	.0004	.0012	.0010	.0269	
681	5.6533	-.01	7.82	.2063	.0365	-.0042	-.0004	.0001	-.0016	.0007	.0004	.0011	.0010	.0397	
682	4.8782	-.01	9.82	.2559	.0525	-.0041	-.0004	.0004	-.0021	.0007	.0004	.0011	.0010	.0557	
683	4.2203	-.01	11.84	.3051	.0723	-.0032	-.0005	.0004	-.0022	.0008	.0004	.0011	.0009	.0756	
684	3.6950	-.01	13.84	.3525	.0954	-.0013	-.0005	.0006	-.0024	.0009	.0005	.0010	.0009	.0987	

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TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 8			RUN 43			MACH 2.96			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLS	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
686	1.000	-.01	-4.08	-.0846	.0111	.0146	-.0001	-.0001	-.0003	.0005	.0003	.0008	.0009	.0135
687	.999	-.01	-2.12	-.0414	.0107	.0116	-.0001	-.0001	-.0002	.0005	.0003	.0007	.0009	.0131
688	.999	-.01	-1.09	-.0183	.0104	.0097	-.0002	-.0001	-.0002	.0005	.0003	.0007	.0009	.0128
689	.999	-.01	-.03	.0052	.0101	.0075	-.0002	-.0001	-.0002	.0005	.0003	.0007	.0009	.0125
690	1.000	-.01	.94	.0270	.0098	.0054	-.0002	-.0001	-.0002	.0005	.0003	.0007	.0009	.0122
691	1.000	-.01	2.00	.0509	.0095	.0033	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0118
692	1.000	-.01	2.94	.0722	.0092	.0015	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0116
693	1.000	-.01	3.94	.0940	.0088	.0001	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0112
694	.999	-.01	4.92	.1159	.0084	-.0010	-.0002	-.0002	-.0004	.0005	.0003	.0007	.0009	.0108
695	1.000	-.01	5.95	.1388	.0082	-.0019	-.0002	-.0001	-.0006	.0005	.0003	.0007	.0009	.0106
696	1.000	-.01	7.96	.1836	.0081	-.0025	-.0002	-.0001	-.0009	.0005	.0003	.0007	.0009	.0104
697	1.000	-.01	10.00	.2285	.0081	-.0019	-.0002	.0000	-.0011	.0005	.0003	.0007	.0009	.0105
698	.999	-.01	11.93	.2721	.0083	-.0005	-.0002	-.0000	-.0012	.0006	.0003	.0007	.0009	.0108
699	1.000	-.01	13.97	.3189	.0086	.0015	-.0002	.0001	-.0016	.0007	.0003	.0007	.0009	.0111

UPWT PROJECT 1239					BATCH 8			RUN 43		MACH 2.96				
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
686	-4.8813	-.01	-4.08	-.0834	.0171	.0146	-.0001	-.0001	-.0003	.0005	.0003	.0008	.0009	.0195
687	-3.3459	-.01	-2.12	-.0408	.0122	.0116	-.0001	-.0001	-.0002	.0005	.0003	.0007	.0009	.0146
688	-1.6698	-.01	-1.09	-.0180	.0108	.0097	-.0002	-.0001	-.0002	.0005	.0003	.0007	.0009	.0131
689	.5215	-.01	-.03	.0053	.0101	.0075	-.0002	-.0001	-.0002	.0005	.0003	.0007	.0009	.0124
690	2.6123	-.01	.94	.0268	.0102	.0054	-.0002	-.0001	-.0002	.0005	.0003	.0007	.0009	.0126
691	4.4938	-.01	2.00	.0505	.0112	.0033	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0136
692	5.5627	-.01	2.94	.0715	.0129	.0015	-.0002	-.0002	-.0002	.0005	.0003	.0007	.0009	.0152
693	6.1032	-.01	3.94	.0930	.0152	.0001	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0176
694	6.2504	-.01	4.92	.1145	.0183	-.0010	-.0002	-.0001	-.0004	.0005	.0003	.0007	.0009	.0207
695	6.0806	-.01	5.95	.1369	.0225	-.0019	-.0002	-.0001	-.0006	.0005	.0003	.0007	.0009	.0249
696	5.3965	-.01	7.96	.1803	.0334	-.0025	-.0002	-.0000	-.0009	.0005	.0003	.0007	.0009	.0357
697	4.6805	-.01	10.00	.2231	.0477	-.0019	-.0002	.0000	-.0011	.0005	.0003	.0007	.0009	.0500
698	4.0987	-.01	11.93	.2639	.0644	-.0005	-.0002	.0000	-.0012	.0006	.0003	.0007	.0008	.0668
699	3.5945	-.01	13.97	.3067	.0853	.0015	-.0002	.0002	-.0016	.0006	.0003	.0007	.0008	.0878

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 9			RUN 44			MACH 2.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
707	.505	-.02	-4.21	-.1157	.0151	.0248	-.0002	.0000	-.0009	.0007	.0004	.0013	.0010	.0184
708	.505	-.02	-2.19	-.0627	.0144	.0201	-.0003	.0001	-.0011	.0007	.0004	.0012	.0010	.0177
709	.505	-.02	-1.19	-.0365	.0139	.0173	-.0003	.0001	-.0010	.0006	.0004	.0012	.0010	.0172
710	.505	-.01	-.17	-.0089	.0133	.0142	-.0003	.0000	-.0009	.0006	.0004	.0012	.0010	.0166
711	.504	-.02	.82	.0175	.0127	.0112	-.0004	.0001	-.0011	.0007	.0004	.0012	.0010	.0159
712	.503	-.02	1.83	.0444	.0120	.0082	-.0005	.0001	-.0012	.0007	.0004	.0012	.0010	.0152
713	.503	-.01	2.83	.0708	.0112	.0052	-.0005	.0001	-.0012	.0007	.0004	.0012	.0010	.0144
714	.503	-.02	3.82	.0985	.0104	.0026	-.0005	.0001	-.0012	.0007	.0004	.0012	.0010	.0136
715	.502	-.01	4.81	.1255	.0096	.0005	-.0005	-.0001	-.0012	.0007	.0004	.0012	.0010	.0128
716	.501	-.01	5.82	.1533	.0091	-.0012	-.0005	.0000	-.0014	.0007	.0004	.0012	.0010	.0123
717	.500	-.01	7.93	.2066	.0090	-.0028	-.0004	-.0001	-.0017	.0007	.0004	.0011	.0010	.0122
718	.496	-.01	9.83	.2587	.0091	-.0029	-.0004	.0001	-.0017	.0007	.0004	.0011	.0010	.0123
719	.495	-.01	11.83	.3115	.0093	-.0022	-.0005	.0002	-.0018	.0008	.0005	.0011	.0010	.0126

UPWT PROJECT 1239					BATCH 9			RUN 44			MACH 2.30			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	COB	COBN	CDI	CD UNC
707	-4.8426	-.02	-4.21	-.1139	.0235	.0248	-.0002	.0000	-.0009	.0007	.0004	.0013	.0010	.0268
708	-3.6764	-.02	-2.19	-.0619	.0168	.0201	-.0003	.0001	-.0011	.0007	.0004	.0012	.0010	.0201
709	-2.4574	-.02	-1.19	-.0361	.0147	.0173	-.0003	.0001	-.0010	.0006	.0004	.0012	.0010	.0179
710	-.6606	-.01	-.17	-.0088	.0134	.0142	-.0003	.0000	-.0009	.0006	.0004	.0012	.0010	.0166
711	1.3331	-.02	.82	.0173	.0129	.0112	-.0004	.0001	-.0011	.0007	.0004	.0012	.0010	.0162
712	3.2805	-.02	1.83	.0438	.0134	.0082	-.0005	.0001	-.0012	.0007	.0004	.0012	.0010	.0166
713	4.7756	-.01	2.83	.0700	.0147	.0052	-.0004	.0001	-.0012	.0007	.0004	.0012	.0010	.0179
714	5.7398	-.02	3.82	.0973	.0170	.0026	-.0005	.0002	-.0012	.0007	.0004	.0012	.0010	.0202
715	6.1810	-.01	4.81	.1239	.0200	.0005	-.0005	-.0001	-.0012	.0007	.0004	.0012	.0010	.0233
716	6.1566	-.01	5.82	.1512	.0246	-.0012	-.0005	.0001	-.0014	.0007	.0004	.0012	.0010	.0278
717	5.4783	-.01	7.83	.2029	.0370	-.0028	-.0004	-.0000	-.0017	.0007	.0004	.0011	.0010	.0402
718	4.7582	-.01	9.83	.2526	.0531	-.0029	-.0004	.0002	-.0017	.0007	.0004	.0011	.0010	.0563
719	4.1449	-.01	11.83	.3022	.0729	-.0022	-.0004	.0003	-.0018	.0008	.0004	.0011	.0009	.0761

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 9			RUN 45			MACH 2.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
721	.999	-.01	-4.15	-.1116	.0141	.0240	-.0002	.0000	-.0008	.0007	.0004	.0013	.0010	.0175
722	.997	-.01	-2.20	-.0611	.0136	.0197	-.0002	-.0000	-.0006	.0007	.0004	.0012	.0010	.0169
723	.997	-.01	-1.17	-.0338	.0132	.0169	-.0002	-.0000	-.0006	.0007	.0004	.0012	.0010	.0165
724	.999	-.01	-.19	-.0073	.0127	.0138	-.0003	.0001	-.0009	.0007	.0004	.0012	.0010	.0160
725	1.001	-.01	.82	.0189	.0122	.0108	-.0003	.0000	-.0009	.0007	.0004	.0012	.0010	.0155
726	1.001	-.01	1.82	.0451	.0115	.0080	-.0005	.0001	-.0010	.0007	.0004	.0012	.0010	.0148
727	1.000	-.01	2.80	.0704	.0108	.0053	-.0005	.0001	-.0013	.0007	.0004	.0012	.0010	.0141
728	1.000	-.01	3.82	.1001	.0099	.0026	-.0006	.0002	-.0013	.0007	.0004	.0012	.0010	.0132
729	1.000	-.01	4.84	.1286	.0069	.0002	-.0006	.0002	-.0014	.0007	.0004	.0012	.0010	.0122
730	1.000	-.01	5.83	.1548	.0083	-.0014	-.0006	.0002	-.0015	.0007	.0004	.0012	.0010	.0115
731	1.000	-.00	7.80	.2059	.0082	-.0027	-.0003	.0000	-.0017	.0007	.0004	.0011	.0010	.0114
732	.998	-.01	9.85	.2603	.0081	-.0024	-.0004	.0002	-.0021	.0007	.0004	.0011	.0010	.0114
733	.997	-.01	11.82	.3104	.0082	-.0015	-.0006	.0002	-.0021	.0008	.0005	.0011	.0010	.0115

UPWT PROJECT 1239				BATCH 9				RUN 45				MACH 2.30			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
721	-4.9514	-.01	-4.15	-.1099	.0222	.0240	-.0002	.0000	-.0008	.0007	.0004	.0013	.0010	.0255	
722	-3.7940	-.01	-2.20	-.0604	.0159	.0197	-.0002	-.0000	-.0006	.0007	.0004	.0012	.0010	.0192	
723	-2.4033	-.01	-1.17	-.0334	.0139	.0169	-.0002	-.0000	-.0006	.0007	.0004	.0012	.0010	.0172	
724	-.5642	-.01	-.19	-.0072	.0127	.0138	-.0003	.0000	-.0009	.0007	.0004	.0012	.0010	.0160	
725	1.5030	-.01	.82	.0187	.0125	.0108	-.0003	.0000	-.0009	.0007	.0004	.0012	.0010	.0158	
726	3.4418	-.01	1.82	.0446	.0130	.0080	-.0005	.0001	-.0010	.0007	.0004	.0012	.0010	.0163	
727	4.9032	-.01	2.80	.0696	.0142	.0053	-.0005	.0001	-.0013	.0007	.0004	.0012	.0010	.0175	
728	5.9746	-.01	3.82	.0989	.0166	.0026	-.0006	.0002	-.0013	.0007	.0004	.0012	.0010	.0198	
729	6.4390	-.01	4.84	.1271	.0197	.0002	-.0006	.0003	-.0014	.0007	.0004	.0012	.0010	.0230	
730	6.3804	-.01	5.83	.1528	.0239	-.0014	-.0006	.0002	-.0015	.0007	.0004	.0012	.0010	.0272	
731	5.6153	-.00	7.80	.2023	.0360	-.0027	-.0003	.0001	-.0017	.0007	.0004	.0011	.0010	.0392	
732	4.8410	-.01	9.85	.2544	.0526	-.0024	-.0004	.0003	-.0021	.0007	.0004	.0011	.0010	.0558	
733	4.2102	-.01	11.82	.3013	.0716	-.0015	-.0005	.0004	-.0021	.0008	.0004	.0011	.0009	.0748	

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 9			RUN 46			MACH 2.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/R T	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
735	2.003	-.00	-4.20	-.1094	.0128	.0231	-.0003	.0000	-.0009	.0007	.0004	.0013	.0010	.0162
736	2.004	-.01	-2.18	-.0567	.0124	.0188	-.0004	.0000	-.0007	.0007	.0004	.0012	.0010	.0157
737	2.003	-.00	-1.17	-.0303	.0120	.0161	-.0004	.0000	-.0008	.0007	.0004	.0012	.0010	.0153
738	1.999	-.00	-.17	-.0035	.0117	.0131	-.0005	.0000	-.0009	.0007	.0004	.0012	.0010	.0149
739	2.001	-.01	.81	.0211	.0112	.0104	-.0005	.0001	-.0010	.0007	.0004	.0012	.0010	.0145
740	1.998	-.01	1.82	.0474	.0105	.0077	-.0006	.0001	-.0010	.0007	.0004	.0012	.0010	.0138
741	1.999	-.00	2.84	.0752	.0097	.0050	-.0005	.0001	-.0012	.0007	.0004	.0012	.0010	.0130
742	2.000	-.00	3.77	.0998	.0088	.0027	-.0006	.0002	-.0015	.0007	.0004	.0012	.0010	.0121
743	1.998	-.00	4.79	.1270	.0079	.0006	-.0006	.0002	-.0017	.0007	.0004	.0012	.0010	.0111
744	1.998	-.00	5.82	.1549	.0072	-.0009	-.0006	.0002	-.0018	.0007	.0004	.0012	.0010	.0104
745	2.000	.01	7.83	.2070	.0069	-.0022	-.0005	.0001	-.0019	.0007	.0004	.0011	.0010	.0101

UPWT PROJECT 1239				BATCH 9				RUN 46				MACH 2.30			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
735	-5.1829	-.00	-4.20	-.1078	.0208	.0231	-.0003	.0000	-.0009	.0007	.0004	.0013	.0010	.0241	
736	-3.8597	-.01	-2.18	-.0560	.0145	.0188	-.0004	-.0000	-.0007	.0007	.0004	.0012	.0010	.0178	
737	-2.3643	-.00	-1.17	-.0299	.0126	.0161	-.0004	-.0000	-.0008	.0007	.0004	.0012	.0010	.0159	
738	-.2905	-.00	-.17	-.0034	.0117	.0131	-.0005	.0000	-.0009	.0007	.0004	.0012	.0010	.0150	
739	1.8192	-.01	.81	.0209	.0115	.0104	-.0005	.0001	-.0010	.0007	.0004	.0012	.0010	.0148	
740	3.9119	-.01	1.82	.0469	.0120	.0077	-.0006	.0001	-.0010	.0007	.0004	.0012	.0010	.0153	
741	5.5677	-.00	2.84	.0744	.0134	.0050	-.0005	.0001	-.0012	.0007	.0004	.0012	.0010	.0167	
742	6.4491	-.00	3.77	.0987	.0153	.0027	-.0006	.0002	-.0015	.0007	.0004	.0012	.0010	.0186	
743	6.8069	-.00	4.79	.1255	.0184	.0006	-.0006	.0003	-.0017	.0007	.0004	.0012	.0010	.0217	
744	6.7018	-.00	5.82	.1530	.0228	-.0009	-.0006	.0003	-.0018	.0007	.0004	.0012	.0010	.0261	
745	5.8101	.01	7.83	.2036	.0350	-.0022	-.0004	.0002	-.0019	.0007	.0004	.0011	.0010	.0383	

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 9			PUN 47			MACH 2.96			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
747	.500	-.01	-4.07	-.0879	.0128	.0170	-.0001	-.0002	-.0005	.0004	.0003	.0008	.0009	.0151
748	.500	-.01	-2.07	-.0434	.0120	.0137	-.0002	-.0000	-.0008	.0004	.0003	.0007	.0009	.0143
749	.500	-.02	-1.06	-.0202	.0114	.0116	-.0002	-.0001	-.0006	.0004	.0003	.0007	.0009	.0138
750	.500	-.01	-.06	.0023	.0110	.0094	-.0002	-.0001	-.0007	.0004	.0003	.0007	.0009	.0133
751	.500	-.01	.95	.0257	.0105	.0071	-.0002	-.0002	-.0005	.0004	.0003	.0007	.0009	.0128
752	.500	-.01	1.94	.0481	.0100	.0050	-.0002	-.0002	-.0006	.0004	.0003	.0007	.0009	.0123
753	.500	-.01	2.94	.0711	.0095	.0030	-.0002	-.0002	-.0006	.0005	.0003	.0007	.0009	.0118
754	.501	-.01	3.94	.0931	.0091	.0015	-.0002	-.0002	-.0007	.0005	.0003	.0007	.0009	.0115
755	.500	-.01	4.94	.1153	.0089	.0005	-.0002	-.0002	-.0009	.0005	.0003	.0007	.0009	.0112
756	.501	-.01	5.95	.1379	.0087	-.0004	-.0002	-.0001	-.0010	.0005	.0003	.0007	.0009	.0110
757	.501	-.01	7.95	.1817	.0086	-.0012	-.0002	-.0001	-.0012	.0004	.0003	.0007	.0009	.0109
758	.501	-.01	9.94	.2265	.0087	-.0008	-.0002	-.0002	-.0012	.0005	.0003	.0007	.0009	.0110
759	.501	-.01	11.95	.2707	.0091	.0006	-.0002	-.0001	-.0014	.0005	.0003	.0007	.0009	.0115

UPWT PROJECT 1239					BATCH 9			RUN 47			MACH 2.96			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
747	-4.5551	-.01	-4.07	-.0865	.0190	.0170	-.0001	-.0002	-.0005	.0004	.0003	.0008	.0009	.0214
748	-3.1689	-.01	-2.07	-.0428	.0135	.0137	-.0002	-.0000	-.0008	.0004	.0003	.0007	.0009	.0158
749	-1.6813	-.02	-1.06	-.0199	.0118	.0116	-.0002	-.0001	-.0006	.0004	.0003	.0007	.0009	.0141
750	.2143	-.01	-.06	.0024	.0110	.0094	-.0002	-.0001	-.0007	.0004	.0003	.0007	.0009	.0133
751	2.3445	-.01	.95	.0255	.0109	.0071	-.0002	-.0002	-.0005	.0004	.0003	.0007	.0009	.0132
752	4.1080	-.01	1.94	.0477	.0116	.0050	-.0002	-.0002	-.0006	.0004	.0003	.0007	.0009	.0139
753	5.3633	-.01	2.94	.0704	.0131	.0030	-.0002	-.0002	-.0006	.0005	.0003	.0007	.0009	.0154
754	5.9381	-.01	3.94	.0921	.0155	.0015	-.0002	-.0002	-.0007	.0005	.0003	.0007	.0009	.0178
755	6.0657	-.01	4.94	.1138	.0188	.0005	-.0002	-.0001	-.0009	.0005	.0003	.0007	.0009	.0211
756	5.9402	-.01	5.95	.1360	.0229	-.0004	-.0002	-.0001	-.0010	.0005	.0003	.0007	.0009	.0252
757	5.3055	-.01	7.95	.1784	.0336	-.0012	-.0002	-.0001	-.0012	.0004	.0003	.0007	.0009	.0359
758	4.6365	-.01	9.94	.2211	.0477	-.0008	-.0002	-.0001	-.0012	.0005	.0003	.0007	.0009	.0500
759	4.0392	-.01	11.95	.2623	.0649	.0006	-.0002	-.0000	-.0014	.0005	.0003	.0007	.0008	.0673

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 9				RUN 48				MACH 2.96			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
761	.999	-.01	-4.05	-.0882	.3124	.0171	-.0002	-.0002	-.0003	.0005	.0003	.0008	.0009	.0148	
762	.999	-.01	-2.05	-.0442	.0117	.0141	-.0002	-.0001	-.0004	.0005	.0003	.0007	.0009	.0141	
763	.999	-.01	-1.06	-.0218	.0114	.0121	-.0002	-.0000	-.0005	.0005	.0003	.0007	.0009	.0138	
764	.999	-.01	-.06	.0010	.0110	.0098	-.0003	-.0001	-.0005	.0005	.0003	.0007	.0009	.0134	
765	.999	-.01	.95	.0236	.0106	.0075	-.0002	-.0001	-.0005	.0005	.0003	.0007	.0009	.0130	
766	.999	-.01	1.94	.0464	.0102	.0053	-.0002	-.0002	-.0006	.0005	.0003	.0007	.0009	.0126	
767	.999	-.01	2.94	.0692	.0097	.0033	-.0002	-.0002	-.0007	.0005	.0003	.0007	.0009	.0121	
768	.999	-.01	3.94	.0917	.0092	.0016	-.0002	-.0001	-.0008	.0005	.0003	.0007	.0009	.0116	
769	.998	-.01	4.96	.1148	.0087	.0002	-.0002	-.0002	-.0007	.0005	.0003	.0007	.0009	.0111	
770	.999	-.01	5.95	.1368	.0083	-.0006	-.0003	-.0001	-.0010	.0005	.0003	.0007	.0009	.0107	
771	.999	-.01	7.96	.1814	.0082	-.0013	-.0002	-.0000	-.0013	.0005	.0003	.0007	.0009	.0106	
772	.999	-.01	9.94	.2249	.0082	-.0006	-.0002	.0000	-.0014	.0005	.0003	.0007	.0009	.0106	
773	1.000	-.01	11.95	.2700	.0084	.0009	-.0003	.0000	-.0014	.0006	.0003	.0007	.0009	.0108	

APPENDIX A

UPWT PROJECT 1239				BATCH 9				RUN 48				MACH 2.96			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
761	-4.6811	-.01	-4.05	-.0869	.0186	.0171	-.0002	-.0002	-.0003	.0005	.0003	.0008	.0009	.0210	
762	-3.2738	-.01	-2.05	-.0436	.0133	.0141	-.0002	-.0001	-.0004	.0005	.0003	.0007	.0009	.0157	
763	-1.8234	-.01	-1.06	-.0215	.0118	.0121	-.0002	-.0001	-.0005	.0005	.0003	.0007	.0009	.0142	
764	.0956	-.01	-.06	.0011	.0110	.0098	-.0003	-.0001	-.0005	.0005	.0003	.0007	.0009	.0134	
765	2.1258	-.01	.95	.0233	.0110	.0075	-.0002	-.0001	-.0005	.0005	.0003	.0007	.0009	.0133	
766	3.9130	-.01	1.94	.0459	.0117	.0053	-.0002	-.0002	-.0006	.0005	.0003	.0007	.0009	.0141	
767	5.1596	-.01	2.94	.0685	.0133	.0033	-.0002	-.0002	-.0007	.0005	.0003	.0007	.0009	.0157	
768	5.8447	-.01	3.94	.0906	.0155	.0016	-.0002	-.0001	-.0008	.0005	.0003	.0007	.0009	.0179	
769	6.1133	-.01	4.96	.1133	.0185	.0002	-.0002	-.0001	-.0007	.0005	.0003	.0007	.0009	.0209	
770	6.0035	-.01	5.95	.1349	.0225	-.0006	-.0003	-.0001	-.0010	.0005	.0003	.0007	.0009	.0248	
771	5.3563	-.01	7.96	.1781	.0333	-.0013	-.0003	.0000	-.0013	.0005	.0003	.0007	.0009	.0356	
772	4.6846	-.01	9.94	.2196	.0469	-.0006	-.0002	.0001	-.0014	.0005	.0003	.0007	.0009	.0492	
773	4.0866	-.01	11.95	.2618	.0641	.0009	-.0002	.0001	-.0014	.0006	.0003	.0007	.0008	.0665	

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 9			RUN 49			MACH 2.96			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
775	-4.9862	-.00	-4.05	-.0861	.0173	.0168	-.0002	-.0001	-.0005	.0005	.0003	.0008	.0009	.0197
776	-3.5404	-.01	-2.05	-.0434	.0123	.0139	-.0002	-.0001	-.0003	.0005	.0003	.0007	.0009	.0147
777	-1.9854	-.00	-1.05	-.0215	.0108	.0121	-.0002	-.0001	-.0005	.0005	.0003	.0007	.0009	.0132
778	.0430	-.00	-.04	.0004	.0101	.0099	-.0002	-.0001	-.0005	.0005	.0003	.0007	.0009	.0125
779	2.1717	.00	.95	.0220	.0101	.0078	-.0002	-.0001	-.0004	.0005	.0003	.0007	.0009	.0125
780	4.1635	.01	1.97	.0454	.0109	.0057	-.0002	-.0002	-.0005	.0006	.0003	.0007	.0009	.0133
781	5.4371	.01	2.95	.0671	.0123	.0038	-.0002	-.0002	-.0005	.0006	.0003	.0007	.0009	.0148
782	6.1215	.01	3.94	.0890	.0145	.0023	-.0002	-.0002	-.0006	.0006	.0003	.0007	.0009	.0170
783	6.3420	.01	4.96	.1114	.0176	.0011	-.0002	-.0001	-.0008	.0006	.0003	.0007	.0009	.0200
784	6.2266	.01	5.96	.1328	.0213	.0003	-.0002	-.0001	-.0008	.0006	.0003	.0007	.0009	.0237
785	5.5477	.01	7.94	.1746	.0315	-.0004	-.0002	-.0000	-.0012	.0005	.0003	.0007	.0009	.0338

UPWT PROJECT 1239					BATCH 9			RUN 49		MACH 2.96				
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CL9	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
775	2.502	-.00	-4.05	-.0874	.0111	.0168	-.0002	-.0001	-.0005	.0005	.0003	.0008	.0009	.0136
776	2.501	-.01	-2.05	-.0439	.0107	.0139	-.0002	-.0001	-.0003	.0005	.0003	.0007	.0009	.0131
777	2.502	-.00	-1.05	-.0218	.0104	.0121	-.0002	-.0001	-.0005	.0005	.0003	.0007	.0009	.0128
778	2.500	-.00	-.04	.0004	.0101	.0099	-.0002	-.0001	-.0005	.0005	.0003	.0007	.0009	.0125
779	2.502	.00	.95	.0222	.0098	.0078	-.0002	-.0001	-.0004	.0005	.0003	.0007	.0009	.0122
780	2.501	.01	1.97	.0458	.0093	.0057	-.0002	-.0002	-.0005	.0006	.0003	.0007	.0009	.0117
781	2.502	.01	2.95	.0678	.0089	.0038	-.0002	-.0002	-.0005	.0006	.0003	.0007	.0009	.0113
782	2.501	.01	3.94	.0900	.0084	.0023	-.0002	-.0002	-.0006	.0006	.0003	.0007	.0009	.0108
783	2.500	.01	4.96	.1128	.0078	.0011	-.0002	-.0002	-.0008	.0006	.0003	.0007	.0009	.0103
784	2.501	.01	5.96	.1346	.0074	.0003	-.0002	-.0001	-.0008	.0006	.0003	.0007	.0009	.0098
785	2.502	.01	7.94	.1777	.0070	-.0004	-.0002	-.0001	-.0012	.0005	.0003	.0007	.0009	.0094

TABLE AIII.- Continued

UPWT PROJECT 1239					RATCH 10			RUN 50			MACH 2.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNR	CY	CAC	CAB	CABN	CAI	CA UNC
794	.998	.02	-4.19	-.1017	.0131	.0181	.0030	-.0014	.0018	.0007	.0004	.0013	.0010	.0164
795	.999	.02	-2.20	-.0467	.0128	.0135	.0029	-.0015	.0018	.0007	.0004	.0012	.0010	.0161
796	.997	.02	-1.21	-.0245	.0126	.0110	.0029	-.0015	.0019	.0007	.0004	.0012	.0010	.0159
797	.997	.02	-.19	.0035	.0122	.0079	.0026	-.0015	.0017	.0007	.0004	.0012	.0010	.0155
798	.997	.02	.81	.0283	.0118	.0054	.0025	-.0014	.0017	.0007	.0004	.0012	.0010	.0152
799	.997	.02	1.82	.0547	.0113	.0026	.0023	-.0014	.0014	.0007	.0004	.0012	.0010	.0146
800	.996	.02	2.81	.0805	.0106	.0000	.0021	-.0014	.0014	.0007	.0004	.0012	.0010	.0139
801	.998	.02	3.81	.1078	.0100	-.0025	.0022	-.0015	.0017	.0007	.0004	.0012	.0010	.0133
802	.997	.02	4.87	.1369	.0092	-.0046	.0019	-.0015	.0014	.0007	.0004	.0012	.0010	.0124
803	.997	.03	5.81	.1614	.0088	-.0058	.0018	-.0016	.0014	.0007	.0004	.0012	.0010	.0121
804	.997	.03	7.85	.2160	.0091	-.0067	.0015	-.0017	.0012	.0007	.0004	.0011	.0010	.0123
805	.998	.03	9.87	.2674	.0091	-.0066	.0016	-.0016	.0010	.0008	.0004	.0011	.0010	.0124
806	.996	.04	11.86	.3185	.0093	-.0058	.0017	-.0017	.0013	.0008	.0005	.0011	.0010	.0127
807	.997	.03	13.91	.3726	.0096	-.0040	.0017	-.0016	.0013	.0009	.0005	.0011	.0010	.0130

UPWT PROJECT 1239					BATCH 10			RUN 50			MACH 2.30			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	COB	COBN	CDI	CD UNC
794	-4.8886	.02	-4.19	-.1001	.0205	.0181	.0031	-.0012	.0018	.0007	.0004	.0013	.0010	.0238
795	-3.2712	.02	-2.20	-.0480	.0147	.0135	.0029	-.0013	.0018	.0007	.0004	.0012	.0010	.0180
796	-1.8367	.02	-1.21	-.0241	.0131	.0110	.0029	-.0015	.0019	.0007	.0004	.0012	.0010	.0164
797	.2907	.02	-.19	.0036	.0122	.0079	.0026	-.0015	.0017	.0007	.0004	.0012	.0010	.0155
798	2.2959	.02	.81	.0281	.0122	.0054	.0025	-.0015	.0017	.0007	.0004	.0012	.0010	.0156
799	4.1571	.02	1.82	.0542	.0130	.0026	.0023	-.0015	.0014	.0007	.0004	.0012	.0010	.0163
800	5.4764	.02	2.81	.0798	.0146	.0000	.0021	-.0015	.0014	.0007	.0004	.0012	.0010	.0179
801	6.2347	.02	3.81	.1067	.0171	-.0025	.0021	-.0017	.0017	.0007	.0004	.0012	.0010	.0204
802	6.5208	.02	4.87	.1353	.0207	-.0046	.0018	-.0016	.0014	.0007	.0004	.0012	.0010	.0240
803	6.3502	.03	5.81	.1593	.0251	-.0058	.0016	-.0018	.0014	.0007	.0004	.0012	.0010	.0283
804	5.5116	.03	7.85	.2122	.0385	-.0067	.0013	-.0019	.0012	.0007	.0004	.0011	.0010	.0417
805	4.7678	.03	9.87	.2613	.0548	-.0066	.0013	-.0019	.0010	.0007	.0004	.0011	.0010	.0580
806	4.1429	.04	11.86	.3089	.0746	-.0058	.0013	-.0020	.0013	.0008	.0004	.0011	.0009	.0778
807	3.6252	.03	13.91	.3584	.0989	-.0040	.0012	-.0020	.0013	.0009	.0005	.0010	.0009	.1022

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 10			RUN 51			MACH 2.96				
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
809	1.001	-.01	-4.08	-.0817	.0115	.0132	.0019	-.0005	.0006	.0005	.0003	.0008	.0009	.0140
810	1.000	-.00	-2.07	-.0379	.0113	.0101	.0020	-.0007	.0011	.0005	.0003	.0007	.0009	.0137
811	1.001	-.00	-1.05	-.0146	.0111	.0080	.0020	-.0008	.0011	.0005	.0003	.0007	.0009	.0135
812	1.001	-.00	-.02	.0087	.0108	.0057	.0019	-.0008	.0010	.0005	.0003	.0007	.0009	.0132
813	1.001	.00	.98	.0312	.0105	.0036	.0018	-.0009	.0009	.0005	.0003	.0007	.0009	.0129
814	1.000	.00	1.96	.0533	.0102	.0017	.0017	-.0009	.0011	.0005	.0003	.0007	.0009	.0126
815	1.000	.00	2.95	.0750	.0100	-.0001	.0016	-.0010	.0011	.0005	.0003	.0007	.0009	.0123
816	1.000	.01	4.01	.0989	.0095	-.0017	.0014	-.0010	.0010	.0005	.0003	.0007	.0009	.0119
817	1.000	.01	4.90	.1185	.0092	-.0027	.0014	-.0011	.0010	.0005	.0003	.0007	.0009	.0116
818	1.000	.01	5.94	.1420	.0090	-.0035	.0013	-.0011	.0010	.0005	.0003	.0007	.0009	.0114
819	1.000	.01	7.95	.1861	.0090	-.0044	.0013	-.0012	.0010	.0005	.0003	.0007	.0009	.0113
820	1.000	.02	9.99	.2319	.0091	-.0038	.0014	-.0014	.0012	.0005	.0003	.0007	.0009	.0115
821	1.000	.02	11.98	.2770	.0094	-.0024	.0015	-.0015	.0013	.0006	.0003	.0007	.0009	.0119
822	1.000	.02	14.02	.3227	.0098	-.0006	.0015	-.0016	.0012	.0006	.0003	.0007	.0009	.0124

UPWT PROJECT 1239				BATCH 10				RUN 51		MACH 2.96				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDR	CDBN	CDI	CD UNC
809	-4.6429	-.01	-4.08	-.0805	.0173	.0132	.0020	-.0004	.0006	.0005	.0003	.0008	.0009	.0197
810	-2.9421	-.00	-2.07	-.0373	.0127	.0101	.0021	-.0006	.0011	.0005	.0003	.0007	.0009	.0151
811	-1.2546	-.00	-1.05	-.0143	.0114	.0080	.0020	-.0007	.0011	.0005	.0003	.0007	.0009	.0137
812	.8041	-.00	-.02	.0067	.0108	.0057	.0019	-.0008	.0010	.0005	.0003	.0007	.0009	.0132
813	2.7960	.00	.98	.0310	.0111	.0036	.0018	-.0009	.0009	.0005	.0003	.0007	.0009	.0134
814	4.3792	.00	1.96	.0528	.0121	.0017	.0017	-.0010	.0011	.0005	.0003	.0007	.0009	.0144
815	5.3827	.00	2.95	.0743	.0138	-.0001	.0016	-.0010	.0011	.0005	.0003	.0007	.0009	.0162
816	5.9585	.01	4.01	.0978	.0164	-.0017	.0014	-.0011	.0010	.0005	.0003	.0007	.0009	.0188
817	6.0651	.01	4.90	.1171	.0193	-.0027	.0013	-.0012	.0010	.0005	.0003	.0007	.0009	.0217
818	5.9301	.01	5.94	.1400	.0236	-.0035	.0011	-.0013	.0010	.0005	.0003	.0007	.0009	.0260
819	5.2751	.01	7.95	.1827	.0346	-.0044	.0012	-.0014	.0010	.0005	.0003	.0007	.0009	.0370
820	4.5992	.02	9.99	.2263	.0492	-.0038	.0011	-.0016	.0012	.0005	.0003	.0007	.0009	.0516
821	4.0234	.02	11.98	.2684	.0667	-.0024	.0011	-.0018	.0013	.0006	.0003	.0007	.0008	.0691
822	3.5327	.02	14.02	.3100	.0877	-.0006	.0011	-.0019	.0012	.0006	.0003	.0007	.0008	.0902

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 12			RUN 54			MACH 2.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
865	.999	-.01	-4.26	-.0955	.0124	.0128	.0000	-.0001	-.0005	.0007	.0004	.0013	.0010	.0158
866	.999	-.01	-2.14	-.0388	.0125	.0077	-.0002	-.0001	-.0006	.0007	.0004	.0012	.0010	.0158
867	.999	-.01	-1.19	-.0136	.0124	.0052	-.0002	.0000	-.0007	.0007	.0004	.0012	.0010	.0157
868	.999	-.01	-.14	.0132	.0121	.0026	-.0002	-.0001	-.0007	.0007	.0004	.0012	.0010	.0154
869	1.000	-.01	.89	.0401	.0117	-.0002	-.0004	.0000	-.0009	.0007	.0004	.0012	.0010	.0151
870	.999	-.01	1.85	.0640	.0114	-.0026	-.0004	.0001	-.0011	.0007	.0004	.0012	.0010	.0147
871	.999	-.01	2.85	.0915	.0108	-.0052	-.0006	.0002	-.0013	.0007	.0004	.0012	.0010	.0141
872	1.000	-.01	3.90	.1188	.0102	-.0077	-.0005	.0001	-.0012	.0007	.0004	.0012	.0010	.0135
873	.999	-.01	4.90	.1464	.0097	-.0095	-.0006	.0003	-.0016	.0007	.0004	.0012	.0010	.0129
874	.998	-.01	5.82	.1690	.0095	-.0101	-.0005	.0002	-.0016	.0007	.0004	.0012	.0010	.0128
875	.997	-.01	7.81	.2207	.0101	-.0109	-.0005	.0002	-.0019	.0007	.0004	.0011	.0010	.0134
876	.996	-.01	9.87	.2758	.0103	-.0110	-.0005	.0004	-.0024	.0008	.0004	.0011	.0010	.0136
877	.997	-.01	11.81	.3261	.0107	-.0103	-.0006	.0005	-.0025	.0008	.0005	.0011	.0010	.0140
878	.998	-.02	13.84	.3793	.0111	-.0087	-.0007	.0007	-.0026	.0009	.0005	.0011	.0010	.0145

UPWT PROJECT 1239					BATCH 12			RUN 54			MACH 2.30			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
865	-4.8305	-.01	-4.26	-.0940	.0195	.0128	.0000	-.0001	-.0005	.0007	.0004	.0013	.0010	.0228
866	-2.7393	-.01	-2.14	-.0381	.0139	.0077	-.0002	-.0001	-.0006	.0007	.0004	.0012	.0010	.0172
867	-1.0438	-.01	-1.19	-.0132	.0127	.0052	-.0002	.0000	-.0007	.0007	.0004	.0012	.0010	.0160
868	1.1039	-.01	-.14	.0133	.0121	.0026	-.0002	-.0001	-.0007	.0007	.0004	.0012	.0010	.0154
869	3.2218	-.01	.89	.0398	.0124	-.0002	-.0004	.0000	-.0009	.0007	.0004	.0012	.0010	.0157
870	4.7355	-.01	1.85	.0635	.0134	-.0026	-.0004	.0001	-.0011	.0007	.0004	.0012	.0010	.0167
871	5.9217	-.01	2.85	.0907	.0153	-.0052	-.0006	.0002	-.0013	.0007	.0004	.0012	.0010	.0186
872	6.4392	-.01	3.90	.1176	.0183	-.0077	-.0005	.0002	-.0012	.0007	.0004	.0012	.0010	.0216
873	6.5413	-.01	4.90	.1447	.0221	-.0095	-.0006	.0004	-.0016	.0007	.0004	.0012	.0010	.0254
874	6.2677	-.01	5.82	.1667	.0266	-.0101	-.0004	.0002	-.0016	.0007	.0004	.0012	.0010	.0299
875	5.4212	-.01	7.81	.2168	.0400	-.0109	-.0005	.0003	-.0019	.0007	.0004	.0011	.0010	.0432
876	4.6876	-.01	9.87	.2693	.0574	-.0110	-.0005	.0005	-.0024	.0007	.0004	.0011	.0010	.0607
877	4.0980	-.01	11.81	.3162	.0772	-.0103	-.0005	.0006	-.0025	.0008	.0004	.0011	.0009	.0804
878	3.5928	-.02	13.84	.3647	.1015	-.0087	-.0005	.0008	-.0026	.0009	.0005	.0010	.0009	.1048

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 12			RUN 55		MACH 2.96				
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
880	.999	-.01	-4.05	-.0749	.0110	.0094	-.0000	-.0001	-.0003	.0005	.0003	.0008	.0009	.0134
881	.998	-.01	-2.06	-.0301	.0110	.0060	-.0001	-.0000	-.0004	.0005	.0003	.0007	.0009	.0134
882	.997	-.01	-1.07	-.0081	.0110	.0041	-.0001	-.0000	-.0005	.0005	.0003	.0007	.0009	.0133
883	.997	-.01	-.09	.0143	.0108	.0020	-.0001	-.0000	-.0006	.0005	.0003	.0007	.0009	.0132
884	.996	-.01	.93	.0370	.0106	-.0000	-.0001	-.0001	-.0005	.0005	.0003	.0007	.0009	.0130
885	.997	-.01	2.01	.0603	.0105	-.0019	-.0001	-.0001	-.0004	.0005	.0003	.0007	.0009	.0128
886	1.002	-.01	3.00	.0824	.0103	-.0035	-.0001	-.0001	-.0005	.0005	.0003	.0007	.0009	.0127
887	1.002	-.01	3.97	.1033	.0100	-.0047	-.0002	-.0001	-.0006	.0005	.0003	.0007	.0009	.0124
888	1.002	-.01	4.96	.1251	.0098	-.0057	-.0002	-.0001	-.0007	.0005	.0003	.0007	.0009	.0122
889	1.001	-.01	5.95	.1467	.0097	-.0064	-.0002	-.0000	-.0008	.0005	.0003	.0007	.0009	.0121
890	.999	-.01	7.97	.1926	.0098	-.0074	-.0002	-.0000	-.0010	.0005	.0003	.0007	.0009	.0122
891	1.000	-.01	9.96	.2369	.0101	-.0070	-.0002	.0001	-.0013	.0005	.0003	.0007	.0009	.0125
892	.999	-.01	11.98	.2826	.0106	-.0058	-.0003	.0001	-.0014	.0006	.0003	.0007	.0009	.0131
893	1.000	-.01	14.02	.3295	.0112	-.0041	-.0002	.0002	-.0017	.0006	.0003	.0007	.0009	.0137

UPWT PROJECT 1239					BATCH 12			RUN 55		MACH 2.96				
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
880	-4.5435	-.01	-4.05	-.0737	.0162	.0094	-.0000	-.0001	-.0003	.0005	.0003	.0008	.0009	.0186
881	-2.4431	-.01	-2.06	-.0296	.0121	.0060	-.0001	-.0000	-.0004	.0005	.0003	.0007	.0009	.0145
882	-1.7041	-.01	-1.07	-.0078	.0111	.0041	-.0001	-.0000	-.0005	.0005	.0003	.0007	.0009	.0135
883	1.3252	-.01	-.09	.0143	.0108	.0020	-.0001	-.0000	-.0006	.0005	.0003	.0007	.0009	.0132
884	3.2759	-.01	.93	.0368	.0112	-.0000	-.0001	-.0001	-.0005	.0005	.0003	.0007	.0009	.0136
885	4.7612	-.01	2.01	.0598	.0126	-.0019	-.0001	-.0001	-.0004	.0005	.0003	.0007	.0009	.0149
886	5.6032	-.01	3.00	.0816	.0146	-.0035	-.0001	-.0001	-.0005	.0005	.0003	.0007	.0009	.0170
887	5.9647	-.01	3.97	.1022	.0171	-.0047	-.0002	-.0001	-.0006	.0005	.0003	.0007	.0009	.0195
888	6.0008	-.01	4.96	.1235	.0206	-.0057	-.0002	-.0001	-.0007	.0005	.0003	.0007	.0009	.0230
889	5.8222	-.01	5.95	.1446	.0248	-.0064	-.0002	-.0000	-.0008	.0005	.0003	.0007	.0009	.0272
890	5.1918	-.01	7.97	.1889	.0364	-.0074	-.0002	.0000	-.0010	.0005	.0003	.0007	.0009	.0387
891	4.5369	-.01	9.96	.2311	.0509	-.0070	-.0002	.0001	-.0013	.0005	.0003	.0007	.0009	.0533
892	3.9637	-.01	11.98	.2736	.0690	-.0058	-.0002	.0002	-.0014	.0006	.0003	.0007	.0008	.0714
893	3.4880	-.01	14.02	.3162	.0907	-.0041	-.0002	.0002	-.0017	.0006	.0003	.0007	.0008	.0931

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 13				RUN 56		MACH 2.30				
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
902	.996	-.02	-4.1F	-.107F	.0131	.0210	-.0019	.0005	-.0021	.0007	.0004	.0013	.0010	.0164
903	.998	-.02	-2.19	-.0551	.0126	.0166	-.0019	.0005	-.0019	.0007	.0004	.0012	.0010	.0159
904	.997	-.02	-1.19	-.0294	.0123	.0139	-.0019	.0004	-.0018	.0007	.0004	.0012	.0010	.0156
905	.998	-.02	-.19	-.0029	.0119	.0110	-.0019	.0004	-.0020	.0007	.0004	.0012	.0010	.0152
906	.998	-.02	.80	.0226	.0115	.0082	-.0019	.0004	-.0019	.0007	.0004	.0012	.0010	.0148
907	.996	-.02	1.80	.0492	.0108	.0054	-.0019	.0004	-.0020	.0007	.0004	.0012	.0010	.0142
908	.997	-.02	2.82	.0763	.0101	.0027	-.0018	.0005	-.0022	.0007	.0004	.0012	.0010	.0134
909	.997	-.02	3.79	.1036	.0093	.0001	-.0020	.0006	-.0024	.0007	.0004	.0012	.0010	.0126
910	.997	-.02	4.80	.1311	.0086	-.0019	-.0018	.0006	-.0025	.0007	.0004	.0012	.0010	.0118
911	.997	-.02	5.82	.1581	.0081	-.0034	-.0016	.0006	-.0027	.0007	.0004	.0012	.0010	.0113
912	.998	-.02	7.80	.2103	.0081	-.0045	-.0014	.0007	-.0030	.0007	.0004	.0011	.0010	.0114
913	.998	-.02	9.82	.2619	.0081	-.0044	-.0015	.0009	-.0035	.0008	.0004	.0011	.0010	.0114
914	.998	-.02	11.79	.3124	.0082	-.0036	-.0016	.0010	-.0038	.0008	.0005	.0011	.0010	.0115
915	.997	-.03	13.81	.3655	.0083	-.0017	-.0018	.0013	-.0041	.0009	.0005	.0011	.0010	.0117

UPWT PROJECT 1239				BATCH 13				RUN 56		MACH 2.30				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
902	-5.0808	-.02	-4.18	-.1062	.0209	.0210	-.0019	.0004	-.0021	.0007	.0004	.0013	.0010	.0242
903	-3.7051	-.02	-2.19	-.0544	.0147	.0166	-.0019	.0004	-.0019	.0007	.0004	.0012	.0010	.0180
904	-2.2553	-.02	-1.19	-.0291	.0129	.0139	-.0019	.0004	-.0018	.0007	.0004	.0012	.0010	.0162
905	-.2374	-.02	-.19	-.0028	.0119	.0110	-.0019	.0004	-.0020	.0007	.0004	.0012	.0010	.0152
906	1.9052	-.02	.80	.0224	.0118	.0082	-.0019	.0004	-.0019	.0007	.0004	.0012	.0010	.0151
907	3.9372	-.02	1.80	.0488	.0124	.0054	-.0019	.0005	-.0020	.0007	.0004	.0012	.0010	.0157
908	5.4600	-.02	2.82	.0755	.0138	.0027	-.0018	.0006	-.0022	.0007	.0004	.0012	.0010	.0171
909	6.3460	-.02	3.79	.1027	.0162	.0001	-.0019	.0007	-.0024	.0007	.0004	.0012	.0010	.0195
910	6.6504	-.02	4.80	.1296	.0195	-.0019	-.0017	.0008	-.0025	.0007	.0004	.0012	.0010	.0228
911	6.4901	-.02	5.82	.1560	.0240	-.0034	-.0015	.0008	-.0027	.0007	.0004	.0012	.0010	.0273
912	5.6479	-.02	7.80	.2067	.0366	-.0045	-.0013	.0009	-.0030	.0007	.0004	.0011	.0010	.0398
913	4.8614	-.02	9.82	.2560	.0527	-.0044	-.0014	.0011	-.0035	.0007	.0004	.0011	.0010	.0559
914	4.2218	-.02	11.79	.3033	.0718	-.0036	-.0014	.0013	-.0038	.0008	.0004	.0011	.0009	.0751
915	3.6934	-.03	13.81	.3520	.0953	-.0017	-.0014	.0017	-.0041	.0009	.0005	.0010	.0009	.0986

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 13				RUN 57				MACH 2.30		
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
917	.998	3.03	-4.15	-.1063	.0131	.0205	-.0025	.0040	-.0223	.0008	.0004	.0013	.0010	.0166
918	1.000	3.02	-2.23	-.0573	.0127	.0163	-.0030	.0041	-.0216	.0008	.0004	.0012	.0010	.0161
919	.998	3.02	-1.16	-.0283	.0124	.0133	-.0035	.0040	-.0213	.0007	.0004	.0012	.0010	.0158
920	.999	3.03	-.20	-.0031	.0120	.0107	-.0038	.0039	-.0212	.0008	.0004	.0012	.0010	.0154
921	.999	3.03	.82	.0232	.0116	.0080	-.0043	.0039	-.0214	.0007	.0004	.0012	.0010	.0149
922	.997	3.03	1.77	.0484	.0110	.0054	-.0048	.0039	-.0219	.0007	.0004	.0012	.0010	.0143
923	.999	3.03	2.79	.0749	.0103	.0029	-.0051	.0040	-.0223	.0007	.0004	.0012	.0010	.0137
924	.999	3.04	3.84	.1028	.0097	.0006	-.0052	.0040	-.0226	.0007	.0004	.0012	.0010	.0130
925	1.000	3.02	4.82	.1304	.0093	-.0012	-.0056	.0043	-.0227	.0008	.0004	.0012	.0010	.0126
926	.999	3.01	5.77	.1554	.0089	-.0024	-.0061	.0047	-.0227	.0008	.0004	.0012	.0010	.0123
927	.999	2.99	7.82	.2109	.0083	-.0038	-.0069	.0048	-.0211	.0008	.0004	.0011	.0010	.0116
928	.999	2.97	9.90	.2650	.0081	-.0037	-.0076	.0052	-.0202	.0008	.0004	.0011	.0010	.0114
929	.999	2.94	11.83	.3155	.0082	-.0027	-.0083	.0058	-.0198	.0008	.0005	.0011	.0010	.0115
930	.999	2.92	13.79	.3667	.0083	-.0008	-.0090	.0058	-.0180	.0009	.0005	.0011	.0010	.0118

UPWT PROJECT 1239				BATCH 13				RUN 57				MACH 2.30		
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	COI	CD UNC
917	-5.0350	3.03	-4.15	-.1047	.0208	.0205	-.0028	.0038	-.0223	.0008	.0004	.0013	.0010	.0242
918	-3.7829	3.02	-2.23	-.0565	.0149	.0163	-.0032	.0039	-.0216	.0008	.0004	.0012	.0010	.0183
919	-2.1560	3.02	-1.16	-.0280	.0130	.0133	-.0036	.0039	-.0213	.0007	.0004	.0012	.0010	.0163
920	-.2495	3.03	-.20	-.0030	.0120	.0107	-.0038	.0039	-.0212	.0008	.0004	.0012	.0010	.0154
921	1.9344	3.03	.82	.0230	.0119	.0080	-.0042	.0039	-.0214	.0007	.0004	.0012	.0010	.0152
922	3.8287	3.03	1.77	.0479	.0125	.0054	-.0046	.0041	-.0219	.0007	.0004	.0012	.0010	.0158
923	5.3091	3.03	2.79	.0742	.0140	.0029	-.0049	.0042	-.0223	.0007	.0004	.0012	.0010	.0173
924	6.1369	3.04	3.84	.1016	.0166	.0006	-.0049	.0043	-.0226	.0007	.0004	.0012	.0010	.0199
925	6.3716	3.02	4.82	.1288	.0202	-.0012	-.0052	.0048	-.0227	.0008	.0004	.0012	.0010	.0235
926	6.2531	3.01	5.77	.1534	.0245	-.0024	-.0056	.0052	-.0227	.0008	.0004	.0012	.0010	.0278
927	5.6149	2.99	7.82	.2073	.0369	-.0038	-.0061	.0057	-.0211	.0008	.0004	.0011	.0010	.0402
928	4.8376	2.97	9.90	.2590	.0535	-.0037	-.0065	.0064	-.0202	.0008	.0004	.0011	.0009	.0568
929	4.2113	2.94	11.83	.3063	.0727	-.0027	-.0069	.0074	-.0198	.0008	.0004	.0011	.0009	.0760
930	3.6971	2.92	13.79	.3532	.0955	-.0008	-.0073	.0078	-.0190	.0009	.0005	.0010	.0009	.0989

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 13				RUN 64		MACH 2.96				
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
993	1.000	-.01	-4.05	-.0849	.0115	.0151	-.0013	-.0001	-.0006	.0005	.0003	.0008	.0009	.0139
994	.999	-.01	-2.09	-.0416	.0110	.0121	-.0013	.0000	-.0008	.0005	.0003	.0007	.0009	.0134
995	.999	-.01	-1.07	-.0183	.0107	.0101	-.0013	-.0000	-.0007	.0005	.0003	.0007	.0009	.0131
996	.999	-.01	-.08	.0039	.0104	.0079	-.0013	-.0000	-.0008	.0005	.0003	.0007	.0009	.0128
997	.999	-.01	.92	.0265	.0101	.0057	-.0012	-.0001	-.0007	.0005	.0003	.0007	.0009	.0124
998	.999	-.01	1.93	.0489	.0097	.0036	-.0011	-.0001	-.0007	.0005	.0003	.0007	.0009	.0121
999	.999	-.01	2.94	.0714	.0094	.0017	-.0010	-.0001	-.0007	.0005	.0003	.0007	.0009	.0118
1000	.999	-.01	3.93	.0940	.0089	.0002	-.0010	-.0000	-.0010	.0005	.0003	.0007	.0009	.0113
1001	.999	-.01	4.96	.1170	.0085	-.0011	-.0009	.0001	-.0012	.0005	.0003	.0007	.0009	.0109
1002	.999	-.01	5.91	.1379	.0082	-.0019	-.0009	.0002	-.0014	.0005	.0003	.0007	.0009	.0106
1003	.999	-.01	7.99	.1840	.0081	-.0026	-.0009	.0003	-.0019	.0005	.0003	.0007	.0009	.0104
1004	.999	-.02	9.95	.2276	.0081	-.0021	-.0010	.0005	-.0022	.0005	.0003	.0007	.0009	.0105
1005	.999	-.02	11.94	.2723	.0083	-.0007	-.0010	.0006	-.0026	.0006	.0003	.0007	.0009	.0108
1006	.999	-.02	13.98	.3189	.0087	.0014	-.0011	.0008	-.0030	.0006	.0003	.0007	.0009	.0112

UPWT PROJECT 1239				BATCH 13				RUN 64		MACH 2.96				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
993	-4.7979	-.01	-4.05	-.0836	.0174	.0151	-.0013	-.0002	-.0006	.0005	.0003	.0008	.0009	.0199
994	-3.2709	-.01	-2.09	-.0410	.0125	.0121	-.0013	-.0000	-.0008	.0005	.0003	.0007	.0009	.0149
995	-1.6311	-.01	-1.07	-.0180	.0111	.0101	-.0013	-.0000	-.0007	.0005	.0003	.0007	.0009	.0134
996	.3792	-.01	-.08	.0039	.0104	.0079	-.0013	-.0000	-.0008	.0005	.0003	.0007	.0009	.0128
997	2.5128	-.01	.92	.0263	.0105	.0057	-.0012	-.0000	-.0007	.0005	.0003	.0007	.0009	.0128
998	4.2690	-.01	1.93	.0485	.0114	.0036	-.0011	-.0001	-.0007	.0005	.0003	.0007	.0009	.0137
999	5.4373	-.01	2.94	.0707	.0130	.0017	-.0010	-.0000	-.0007	.0005	.0003	.0007	.0009	.0154
1000	6.0657	-.01	3.93	.0929	.0153	.0002	-.0010	.0000	-.0010	.0005	.0003	.0007	.0009	.0177
1001	6.2336	-.01	4.96	.1156	.0185	-.0011	-.0009	.0002	-.0012	.0005	.0003	.0007	.0009	.0209
1002	6.0868	-.01	5.91	.1360	.0223	-.0019	-.0009	.0003	-.0014	.0005	.0003	.0007	.0009	.0247
1003	5.3807	-.01	7.99	.1807	.0336	-.0026	-.0008	.0004	-.0019	.0005	.0003	.0007	.0009	.0359
1004	4.6988	-.02	9.95	.2223	.0473	-.0021	-.0009	.0006	-.0022	.0005	.0003	.0007	.0009	.0497
1005	4.0935	-.02	11.94	.2640	.0645	-.0007	-.0009	.0008	-.0026	.0006	.0003	.0007	.0008	.0669
1006	3.5882	-.02	13.98	.3066	.0855	.0014	-.0009	.0010	-.0030	.0006	.0003	.0007	.0008	.0879

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 13			RUN 65			MACH 2.96			
BODY AXIS		AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
1008	.999	3.06	-4.06	-.0862	.0117	.0149	-.0017	.0021	-.0192	.0006	.0003	.0008	.0009	.0142
1009	1.000	3.04	-2.07	-.0427	.0113	.0120	-.0018	.0025	-.0189	.0005	.0003	.0007	.0009	.0137
1010	.999	3.04	-1.10	-.0207	.0111	.0101	-.0019	.0025	-.0187	.0005	.0003	.0007	.0009	.0135
1011	.999	3.05	-.05	.0021	.0108	.0081	-.0018	.0023	-.0185	.0005	.0003	.0007	.0009	.0131
1012	1.000	3.05	.94	.0249	.0104	.0061	-.0018	.0020	-.0182	.0005	.0003	.0007	.0009	.0128
1013	.999	3.06	1.93	.0463	.0100	.0042	-.0017	.0017	-.0182	.0005	.0003	.0007	.0009	.0124
1014	.999	3.07	2.98	.0703	.0096	.0022	-.0019	.0016	-.0185	.0005	.0003	.0007	.0009	.0120
1015	1.000	3.07	3.98	.0930	.0091	.0007	-.0020	.0017	-.0191	.0005	.0003	.0007	.0009	.0115
1016	.999	3.07	4.92	.1142	.0089	-.0005	-.0023	.0019	-.0194	.0005	.0003	.0007	.0009	.0112
1017	1.000	3.06	5.99	.1383	.0087	-.0013	-.0028	.0021	-.0194	.0005	.0003	.0007	.0009	.0111
1018	.999	3.05	7.93	.1809	.0084	-.0017	-.0035	.0023	-.0189	.0005	.0003	.0007	.0009	.0108
1019	.999	3.05	9.99	.2275	.0083	-.0012	-.0044	.0021	-.0177	.0006	.0003	.0007	.0009	.0108
1020	.999	3.05	11.95	.2723	.0085	-.0003	-.0051	.0018	-.0168	.0006	.0003	.0007	.0009	.0109
1021	.999	3.04	13.94	.3191	.0088	.0013	-.0060	.0018	-.0159	.0007	.0003	.0007	.0009	.0113

UPWT PROJECT 1239					BATCH 13			RUN 65			MACH 2.96			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1008	-4.7847	3.06	-4.06	-.0849	.0177	.0149	-.0019	.0019	-.0192	.0006	.0003	.0008	.0009	.0202
1009	-3.2857	3.04	-2.07	-.0421	.0128	.0120	-.0019	.0024	-.0189	.0005	.0003	.0007	.0009	.0153
1010	-1.7837	3.04	-1.10	-.0204	.0114	.0101	-.0019	.0024	-.0187	.0005	.0003	.0007	.0009	.0139
1011	.1950	3.05	-.05	.0021	.0108	.0081	-.0018	.0023	-.0185	.0005	.0003	.0007	.0009	.0131
1012	2.2799	3.05	.94	.0247	.0108	.0061	-.0017	.0020	-.0182	.0005	.0003	.0007	.0009	.0132
1013	3.9560	3.06	1.93	.0459	.0116	.0042	-.0017	.0018	-.0182	.0005	.0003	.0007	.0009	.0140
1014	5.2627	3.07	2.98	.0695	.0132	.0022	-.0018	.0017	-.0185	.0005	.0003	.0007	.0009	.0156
1015	5.9021	3.07	3.98	.0920	.0156	.0007	-.0019	.0018	-.0191	.0005	.0003	.0007	.0009	.0180
1016	6.0556	3.07	4.92	.1128	.0186	-.0005	-.0021	.0021	-.0194	.0005	.0003	.0007	.0009	.0210
1017	5.9088	3.06	5.99	.1363	.0231	-.0013	-.0026	.0024	-.0194	.0005	.0003	.0007	.0009	.0255
1018	5.3335	3.05	7.93	.1776	.0333	-.0017	-.0032	.0027	-.0189	.0005	.0003	.0007	.0009	.0357
1019	4.6613	3.05	9.99	.2221	.0476	-.0012	-.0040	.0029	-.0177	.0006	.0003	.0007	.0009	.0500
1020	4.0840	3.05	11.95	.2640	.0646	-.0003	-.0046	.0028	-.0168	.0006	.0003	.0007	.0008	.0671
1021	3.5938	3.04	13.94	.3068	.0854	.0013	-.0054	.0032	-.0159	.0006	.0003	.0007	.0008	.0879

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 14				RUN 66				MACH 2.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
1030	1.001	.03	-4.18	-.0972	.0120	.0151	.0014	-.0009	.0008	.0007	.0004	.0013	.0010	.0154	
1031	.996	.03	-2.18	-.0440	.0120	.0105	.0014	-.0010	.0008	.0007	.0004	.0012	.0010	.0153	
1032	.995	.03	-1.23	-.0192	.0118	.0080	.0012	-.0011	.0009	.0007	.0004	.0012	.0010	.0151	
1033	.997	.03	-.21	.0068	.0115	.0053	.0012	-.0011	.0009	.0007	.0004	.0012	.0010	.0148	
1034	.998	.03	.79	.0325	.0111	.0026	.0010	-.0010	.0007	.0007	.0004	.0012	.0010	.0144	
1035	.997	.03	1.84	.0594	.0107	-.0001	.0009	-.0010	.0007	.0007	.0004	.0012	.0010	.0140	
1036	.998	.03	2.80	.0842	.0101	-.0024	.0009	-.0009	.0004	.0007	.0004	.0012	.0010	.0134	
1037	.997	.04	3.78	.1110	.0095	-.0050	.0008	-.0010	.0004	.0007	.0004	.0012	.0010	.0128	
1038	.998	.04	4.79	.1384	.0088	-.0067	.0008	-.0010	.0003	.0007	.0004	.0012	.0010	.0121	
1039	.998	.04	5.81	.1656	.0086	-.0078	.0007	-.0010	.0002	.0007	.0004	.0012	.0010	.0118	
1040	.998	.04	7.81	.2173	.0091	-.0085	.0006	-.0010	-.0001	.0007	.0004	.0011	.0010	.0123	
1041	.998	.04	9.81	.2688	.0092	-.0085	.0007	-.0010	-.0003	.0008	.0004	.0011	.0010	.0124	
1042	.998	.04	11.80	.3213	.0094	-.0080	.0006	-.0009	-.0004	.0008	.0005	.0011	.0010	.0127	
1043	.998	.03	13.82	.3744	.0097	-.0063	.0006	-.0008	-.0003	.0009	.0005	.0011	.0010	.0131	

APPENDIX A

UPWT PROJECT 1239				BATCH 14				RUN 66				MACH 2.30			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
1030	-5.0108	.03	-4.18	-.0957	.0191	.0151	.0015	-.0008	.0008	.0007	.0004	.0013	.0010	.0225	
1031	-3.1823	.03	-2.18	-.0434	.0136	.0105	.0014	-.0009	.0008	.0007	.0004	.0012	.0010	.0170	
1032	-1.5488	.03	-1.23	-.0189	.0122	.0080	.0013	-.0010	.0009	.0007	.0004	.0012	.0010	.0155	
1033	.6027	.03	-.21	.0069	.0115	.0053	.0012	-.0011	.0009	.0007	.0004	.0012	.0010	.0148	
1034	2.7887	.03	.79	.0323	.0116	.0026	.0010	-.0010	.0007	.0007	.0004	.0012	.0010	.0149	
1035	4.6846	.03	1.84	.0589	.0126	-.0001	.0009	-.0011	.0007	.0007	.0004	.0012	.0010	.0159	
1036	5.8846	.03	2.80	.0835	.0142	-.0024	.0008	-.0010	.0004	.0007	.0004	.0012	.0010	.0175	
1037	6.5562	.04	3.78	.1099	.0168	-.0050	.0007	-.0011	.0004	.0007	.0004	.0012	.0010	.0201	
1038	6.7225	.04	4.79	.1368	.0204	-.0067	.0007	-.0011	.0003	.0007	.0004	.0012	.0010	.0236	
1039	6.4663	.04	5.81	.1634	.0253	-.0078	.0006	-.0011	.0002	.0007	.0004	.0012	.0010	.0285	
1040	5.5440	.04	7.81	.2135	.0385	-.0085	.0005	-.0011	-.0001	.0007	.0004	.0011	.0010	.0417	
1041	4.7916	.04	9.81	.2627	.0548	-.0085	.0005	-.0011	-.0003	.0007	.0004	.0011	.0010	.0580	
1042	4.1655	.04	11.80	.3118	.0749	-.0080	.0004	-.0010	-.0004	.0008	.0004	.0011	.0009	.0781	
1043	3.6441	.03	13.82	.3603	.0989	-.0063	.0004	-.0009	-.0003	.0009	.0005	.0010	.0009	.1022	

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 14				RUN 67				MACH 2.30			
BODY AXIS		AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
1045	.999	3.07	-4.13	-.0966	.0121	.0145	.0009	.0021	-.0188	.0008	.0004	.0013	.0010	.0155	
1046	.998	3.06	-2.21	-.0468	.0120	.0103	.0002	.0024	-.0185	.0008	.0004	.0012	.0010	.0154	
1047	.998	3.06	-1.23	-.0218	.0118	.0080	-.0001	.0022	-.0181	.0008	.0004	.0012	.0010	.0152	
1048	.998	3.06	-.22	.0046	.0115	.0053	-.0007	.0023	-.0183	.0008	.0004	.0012	.0010	.0148	
1049	.999	3.06	.81	.0312	.0112	.0027	-.0013	.0023	-.0184	.0008	.0004	.0012	.0010	.0145	
1050	1.000	3.06	1.79	.0562	.0107	.0003	-.0018	.0024	-.0190	.0008	.0004	.0012	.0010	.0141	
1051	.999	3.06	2.77	.0826	.0102	-.0021	-.0024	.0025	-.0195	.0008	.0004	.0012	.0010	.0135	
1052	.999	3.07	3.80	.1092	.0097	-.0041	-.0027	.0024	-.0198	.0008	.0004	.0012	.0010	.0130	
1053	.999	3.07	4.80	.1371	.0095	-.0060	-.0031	.0024	-.0195	.0008	.0004	.0012	.0010	.0128	
1054	.999	3.06	5.82	.1652	.0092	-.0071	-.0037	.0025	-.0190	.0008	.0004	.0012	.0010	.0126	
1055	.999	3.02	7.79	.2153	.0091	-.0077	-.0048	.0032	-.0184	.0008	.0004	.0011	.0010	.0124	
1056	.999	3.01	9.80	.2686	.0090	-.0078	-.0054	.0035	-.0176	.0008	.0004	.0011	.0010	.0124	
1057	.999	2.98	11.82	.3213	.0093	-.0069	-.0060	.0040	-.0168	.0008	.0005	.0011	.0010	.0126	
1058	.999	2.96	13.80	.3741	.0096	-.0055	-.0068	.0039	-.0149	.0009	.0005	.0011	.0010	.0130	

UPWT PROJECT 1239				BATCH 14				RUN 67		MACH 2.30				
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1045	-5.0000	3.07	-4.13	-.0952	.0190	.0145	.0008	.0022	-.0188	.0008	.0004	.0013	.0010	.0225
1046	-3.3494	3.06	-2.21	-.0461	.0138	.0103	.0001	.0024	-.0185	.0008	.0004	.0012	.0010	.0172
1047	-1.7492	3.06	-1.23	-.0215	.0123	.0080	-.0002	.0022	-.0181	.0008	.0004	.0012	.0010	.0156
1048	.4084	3.06	-.22	.0047	.0115	.0053	-.0007	.0023	-.0183	.0008	.0004	.0012	.0010	.0148
1049	2.6764	3.06	.81	.0310	.0116	.0027	-.0012	.0023	-.0184	.0008	.0004	.0012	.0010	.0150
1050	4.4740	3.06	1.79	.0558	.0125	.0003	-.0018	.0024	-.0190	.0008	.0004	.0012	.0010	.0158
1051	5.7806	3.06	2.77	.0818	.0142	-.0021	-.0023	.0026	-.0195	.0008	.0004	.0012	.0010	.0175
1052	6.4004	3.07	3.80	.1081	.0169	-.0041	-.0025	.0026	-.0198	.0008	.0004	.0012	.0010	.0202
1053	6.4877	3.07	4.80	.1355	.0209	-.0060	-.0029	.0027	-.0195	.0008	.0004	.0012	.0010	.0242
1054	6.2803	3.06	5.82	.1630	.0260	-.0071	-.0034	.0029	-.0190	.0008	.0004	.0012	.0010	.0293
1055	5.5489	3.02	7.79	.2116	.0381	-.0077	-.0043	.0038	-.0184	.0008	.0004	.0011	.0010	.0414
1056	4.8040	3.01	9.80	.2625	.0546	-.0078	-.0047	.0044	-.0176	.0008	.0004	.0011	.0010	.0579
1057	4.1639	2.98	11.82	.3118	.0749	-.0069	-.0051	.0052	-.0168	.0008	.0004	.0011	.0009	.0782
1058	3.6539	2.96	13.80	.3601	.0986	-.0055	-.0057	.0054	-.0149	.0009	.0005	.0010	.0009	.1019

TABLE AIII.- Continued

UPWT PROJECT 1239

BATCH 14

RUN 74

MACH 2.96

BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW

PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
1120	1.002	-.00	-4.06	-.0780	.0107	.0111	.0008	-.0006	.0005	.0005	.0003	.0008	.0009	.0131
1121	1.002	-.00	-2.09	-.0339	.0106	.0080	.0009	-.0006	.0006	.0005	.0003	.0007	.0009	.0130
1122	1.002	-.00	-1.09	-.0115	.0104	.0060	.0009	-.0007	.0006	.0005	.0003	.0007	.0009	.0128
1123	1.002	.00	-.04	.0115	.0102	.0038	.0009	-.0008	.0007	.0005	.0003	.0007	.0009	.0126
1124	1.002	.00	.94	.0336	.0100	.0018	.0009	-.0009	.0007	.0005	.0003	.0007	.0009	.0124
1125	1.002	.01	1.94	.0556	.0098	.0000	.0008	-.0009	.0007	.0005	.0003	.0007	.0009	.0122
1126	1.001	.01	2.95	.0784	.0096	-.0017	.0007	-.0009	.0005	.0005	.0003	.0007	.0009	.0120
1127	1.002	.01	3.92	.0996	.0093	-.0030	.0007	-.0009	.0004	.0006	.0003	.0007	.0009	.0117
1128	1.002	.01	4.94	.1220	.0090	-.0041	.0006	-.0008	.0002	.0006	.0003	.0007	.0009	.0114
1129	1.002	.01	5.98	.1451	.0088	-.0048	.0006	-.0009	.0001	.0005	.0003	.0007	.0009	.0112
1130	1.002	.01	7.98	.1896	.0089	-.0057	.0007	-.0009	.0000	.0005	.0003	.0007	.0009	.0112
1131	1.002	.01	9.89	.2319	.0091	-.0053	.0007	-.0009	-.0000	.0005	.0003	.0007	.0009	.0115
1132	1.002	.01	11.90	.2775	.0094	-.0041	.0007	-.0010	-.0001	.0006	.0003	.0007	.0009	.0119
1133	1.001	.02	13.92	.3237	.0099	-.0023	.0007	-.0010	-.0003	.0006	.0003	.0007	.0009	.0124

UPWT PROJECT 1239

BATCH 14

RUN 74

MACH 2.96

STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1120	-4.7440	-.00	-4.06	-.0768	.0162	.0111	.0009	-.0005	.0005	.0005	.0003	.0008	.0009	.0186
1121	-2.8339	-.00	-2.09	-.0334	.0118	.0080	.0009	-.0006	.0006	.0005	.0003	.0007	.0009	.0142
1122	-1.0564	-.00	-1.09	-.0112	.0106	.0060	.0009	-.0007	.0006	.0005	.0003	.0007	.0009	.0130
1123	1.1328	.00	-.04	.0116	.0102	.0038	.0009	-.0008	.0007	.0005	.0003	.0007	.0009	.0126
1124	3.1628	.00	.94	.0334	.0106	.0018	.0008	-.0009	.0007	.0005	.0003	.0007	.0009	.0129
1125	4.7175	.01	1.94	.0551	.0117	.0000	.0008	-.0009	.0007	.0005	.0003	.0007	.0009	.0141
1126	5.7215	.01	2.95	.0776	.0136	-.0017	.0007	-.0009	.0005	.0005	.0003	.0007	.0009	.0160
1127	6.1375	.01	3.92	.0986	.0161	-.0030	.0006	-.0009	.0004	.0005	.0003	.0007	.0009	.0185
1128	6.2007	.01	4.94	.1205	.0194	-.0041	.0005	-.0009	.0002	.0006	.0003	.0007	.0009	.0218
1129	5.9946	.01	5.98	.1431	.0239	-.0048	.0005	-.0009	.0001	.0005	.0003	.0007	.0009	.0263
1130	5.3072	.01	7.98	.1862	.0351	-.0057	.0006	-.0010	.0000	.0005	.0003	.0007	.0009	.0374
1131	4.6422	.01	9.89	.2264	.0498	-.0053	.0005	-.0010	-.0000	.0005	.0003	.0007	.0009	.0511
1132	4.0478	.01	11.90	.2689	.0664	-.0041	.0005	-.0011	-.0001	.0006	.0003	.0007	.0008	.0689
1133	3.5576	.02	13.92	.3111	.0874	-.0023	.0005	-.0011	-.0003	.0006	.0003	.0007	.0008	.0899

APPENDIX A

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 14			RUN 75			MACH 2.96			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
1135	1.002	3.07	-4.09	-.0792	.0109	.0107	.0005	.0014	-.0177	.0006	.0003	.0008	.0009	.0134
1136	1.002	3.06	-2.05	-.0350	.0108	.0078	.0004	.0017	-.0175	.0006	.0003	.0007	.0009	.0132
1137	1.002	3.06	-1.05	-.0130	.0106	.0060	.0003	.0017	-.0173	.0005	.0003	.0007	.0009	.0131
1138	1.002	3.06	-.04	.0095	.0105	.0042	.0002	.0015	-.0170	.0005	.0003	.0007	.0009	.0129
1139	1.002	3.07	.92	.0304	.0102	.0025	.0002	.0013	-.0169	.0005	.0003	.0007	.0009	.0126
1140	1.000	3.08	1.97	.0543	.0099	.0005	.0001	.0009	-.0167	.0005	.0003	.0007	.0009	.0123
1141	.999	3.08	2.92	.0751	.0096	-.0010	-.0001	.0007	-.0169	.0005	.0003	.0007	.0009	.0120
1142	1.000	3.09	3.93	.0974	.0093	-.0023	-.0003	.0007	-.0173	.0005	.0003	.0007	.0009	.0117
1143	1.001	3.09	5.00	.1212	.0092	-.0033	-.0008	.0008	-.0176	.0005	.0003	.0007	.0009	.0116
1144	1.001	3.08	5.99	.1431	.0092	-.0040	-.0013	.0009	-.0173	.0005	.0003	.0007	.0009	.0116
1145	1.000	3.08	7.91	.1859	.0091	-.0046	-.0021	.0010	-.0170	.0005	.0003	.0007	.0009	.0115
1146	1.001	3.07	9.93	.2318	.0091	-.0042	-.0029	.0008	-.0156	.0006	.0003	.0007	.0009	.0115
1147	1.001	3.08	11.90	.2768	.0094	-.0034	-.0034	.0004	-.0146	.0006	.0003	.0007	.0009	.0119
1148	1.001	3.07	13.96	.3245	.0099	-.0019	-.0042	.0002	-.0134	.0007	.0003	.0007	.0009	.0125

APPENDIX A

UPWT PROJECT 1239				BATCH 14			RUN 75			MACH 2.96				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1135	-4.7221	3.07	-4.09	-.0780	.0165	.0107	.0004	.0014	-.0177	.0006	.0003	.0008	.0009	.0190
1136	-2.8638	3.06	-2.05	-.0345	.0120	.0078	.0003	.0017	-.0175	.0006	.0003	.0007	.0009	.0145
1137	-1.1719	3.06	-1.05	-.0128	.0109	.0060	.0002	.0017	-.0173	.0005	.0003	.0007	.0009	.0133
1138	.9132	3.06	-.04	.0095	.0104	.0042	.0002	.0015	-.0170	.0005	.0003	.0007	.0009	.0129
1139	2.8199	3.07	.92	.0302	.0107	.0025	.0002	.0013	-.0169	.0005	.0003	.0007	.0009	.0131
1140	4.5658	3.08	1.97	.0538	.0118	.0005	.0001	.0009	-.0167	.0005	.0003	.0007	.0009	.0142
1141	5.5296	3.08	2.92	.0744	.0134	-.0010	-.0000	.0007	-.0169	.0005	.0003	.0007	.0009	.0158
1142	6.0277	3.09	3.93	.0964	.0160	-.0023	-.0003	.0007	-.0173	.0005	.0003	.0007	.0009	.0184
1143	6.0530	3.09	5.00	.1197	.0198	-.0033	-.0007	.0009	-.0176	.0005	.0003	.0007	.0009	.0222
1144	5.8621	3.08	5.99	.1410	.0241	-.0040	-.0012	.0010	-.0173	.0005	.0003	.0007	.0009	.0265
1145	5.2726	3.08	7.91	.1825	.0346	-.0046	-.0019	.0013	-.0170	.0005	.0003	.0007	.0009	.0370
1146	4.6213	3.07	9.93	.2262	.0490	-.0042	-.0027	.0013	-.0156	.0006	.0003	.0007	.0009	.0514
1147	4.0491	3.08	11.90	.2683	.0663	-.0034	-.0033	.0011	-.0146	.0006	.0003	.0007	.0008	.0687
1148	3.5479	3.07	13.96	.3118	.0879	-.0019	-.0040	.0012	-.0134	.0006	.0003	.0007	.0008	.0904

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 15			RUN 76			MACH 2.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
1166	.997	.01	-4.22	-.1026	.0118	.0185	.0001	-.0002	-.0004	.0007	.0004	.0013	.0010	.0152
1167	.992	.01	-2.21	-.0504	.0114	.0137	-.0000	-.0001	-.0004	.0007	.0004	.0012	.0010	.0148
1168	.995	.01	-1.20	-.0233	.0112	.0108	-.0001	-.0000	-.0006	.0007	.0004	.0012	.0010	.0145
1169	.995	.01	-.17	.0039	.0108	.0077	-.0003	.0000	-.0008	.0007	.0004	.0012	.0010	.0141
1170	.995	.01	.82	.0296	.0104	.0050	-.0003	.0000	-.0009	.0007	.0004	.0012	.0010	.0137
1171	.993	.01	1.86	.0573	.0098	.0018	-.0004	.0000	-.0010	.0007	.0004	.0012	.0010	.0132
1172	.995	.01	2.86	.0835	.0092	-.0011	-.0004	.0000	-.0009	.0007	.0004	.0012	.0010	.0125
1173	.996	.01	3.85	.1093	.0084	-.0038	-.0004	-.0000	-.0010	.0007	.0004	.0012	.0010	.0117
1174	.994	.01	4.80	.1347	.0079	-.0059	-.0004	.0001	-.0015	.0007	.0004	.0012	.0010	.0112
1175	.997	.01	5.80	.1624	.0075	-.0077	-.0004	-.0000	-.0013	.0007	.0004	.0012	.0010	.0108
1176	.993	.01	7.81	.2129	.0079	-.0092	-.0005	.0001	-.0018	.0007	.0004	.0011	.0010	.0112
1177	.993	.02	9.80	.2648	.0080	-.0105	-.0004	.0001	-.0021	.0007	.0004	.0011	.0010	.0112
1178	.993	.02	11.81	.3170	.0081	-.0112	-.0005	.0002	-.0024	.0008	.0005	.0011	.0010	.0114
1179	.995	.02	13.89	.3719	.0081	-.0111	-.0005	.0003	-.0028	.0009	.0005	.0011	.0010	.0115

UPWT PROJECT 1239					BATCH 15			RUN 76			MACH 2.30			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1166	-5.2401	.01	-4.22	-.1011	.0193	.0185	.0001	-.0002	-.0004	.0007	.0004	.0013	.0010	.0227
1167	-3.7141	.01	-2.21	-.0497	.0134	.0137	-.0000	-.0001	-.0004	.0007	.0004	.0012	.0010	.0167
1168	-1.9651	.01	-1.20	-.0229	.0117	.0108	-.0001	-.0000	-.0006	.0007	.0004	.0012	.0010	.0150
1169	.3720	.01	-.17	.0040	.0108	.0077	-.0003	.0000	-.0008	.0007	.0004	.0012	.0010	.0141
1170	2.7151	.01	.82	.0295	.0108	.0050	-.0003	.0000	-.0009	.0007	.0004	.0012	.0010	.0142
1171	4.8566	.01	1.86	.0568	.0117	.0018	-.0004	.0000	-.0010	.0007	.0004	.0012	.0010	.0150
1172	6.2198	.01	2.86	.0828	.0133	-.0011	-.0004	.0001	-.0009	.0007	.0004	.0012	.0010	.0166
1173	6.8756	.01	3.85	.1083	.0157	-.0038	-.0004	-.0000	-.0010	.0007	.0004	.0012	.0010	.0190
1174	6.9789	.01	4.80	.1333	.0191	-.0059	-.0004	.0001	-.0015	.0007	.0004	.0012	.0010	.0224
1175	6.7146	.01	5.80	.1604	.0239	-.0077	-.0004	.0000	-.0013	.0007	.0004	.0012	.0010	.0271
1176	5.6899	.01	7.81	.2093	.0368	-.0092	-.0005	.0002	-.0018	.0007	.0004	.0011	.0010	.0400
1177	4.8901	.02	9.80	.2589	.0529	-.0105	-.0004	.0002	-.0021	.0007	.0004	.0011	.0010	.0562
1178	4.2323	.02	11.81	.3078	.0727	-.0112	-.0004	.0003	-.0024	.0008	.0004	.0011	.0009	.0760
1179	3.6874	.02	13.89	.3581	.0971	-.0111	-.0004	.0004	-.0028	.0009	.0005	.0010	.0009	.1004

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 15				RUN 77				MACH 2.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
1181	.995	3.07	-4.23	-.1034	.0118	.0181	-.0005	.0031	-.0202	.0008	.0004	.0013	.0010	.0152	
1182	.997	3.05	-2.25	-.0511	.0115	.0131	-.0013	.0035	-.0201	.0008	.0004	.0012	.0010	.0149	
1183	.997	3.05	-1.19	-.0233	.0112	.0103	-.0017	.0035	-.0198	.0008	.0004	.0012	.0010	.0146	
1184	.995	3.05	-.20	.0011	.0109	.0077	-.0020	.0034	-.0197	.0008	.0004	.0012	.0010	.0143	
1185	.995	3.06	.81	.0290	.0105	.0048	-.0026	.0033	-.0200	.0008	.0004	.0012	.0010	.0139	
1186	.996	3.06	1.80	.0535	.0100	.0020	-.0031	.0033	-.0206	.0008	.0004	.0012	.0010	.0134	
1187	.996	3.07	2.32	.0812	.0094	-.0007	-.0035	.0033	-.0216	.0008	.0004	.0012	.0010	.0128	
1188	.997	3.08	3.88	.1087	.0088	-.0033	-.0035	.0031	-.0219	.0008	.0004	.0012	.0010	.0121	
1189	.997	3.08	4.76	.1324	.0085	-.0051	-.0039	.0031	-.0222	.0008	.0004	.0012	.0010	.0118	
1190	.996	3.08	5.80	.1599	.0083	-.0068	-.0043	.0032	-.0221	.0008	.0004	.0012	.0010	.0116	
1191	.996	3.08	7.82	.2134	.0079	-.0087	-.0052	.0033	-.0221	.0008	.0004	.0011	.0010	.0112	
1192	.996	3.10	9.89	.2668	.0080	-.0099	-.0054	.0030	-.0232	.0008	.0004	.0011	.0010	.0113	
1193	.996	3.12	11.85	.3177	.0081	-.0105	-.0057	.0027	-.0243	.0008	.0005	.0011	.0010	.0114	
1194	.996	3.13	13.87	.3698	.0081	-.0103	-.0064	.0024	-.0243	.0009	.0005	.0011	.0010	.0116	

UPWT PROJECT 1239				BATCH 15				RUN 77		MACH 2.30				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1181	-5.2654	3.07	-4.23	-.1019	.0194	.0181	-.0007	.0030	-.0202	.0008	.0004	.0013	.0010	.0228
1182	-3.7389	3.05	-2.25	-.0504	.0135	.0131	-.0015	.0034	-.0201	.0008	.0004	.0012	.0010	.0169
1183	-1.9555	3.05	-1.19	-.0229	.0117	.0103	-.0018	.0034	-.0198	.0008	.0004	.0012	.0010	.0151
1184	.1057	3.05	-.20	.0012	.0109	.0077	-.0020	.0034	-.0197	.0008	.0004	.0012	.0010	.0143
1185	2.6298	3.06	.81	.0288	.0110	.0048	-.0026	.0033	-.0200	.0008	.0004	.0012	.0010	.0143
1186	4.5295	3.06	1.80	.0531	.0117	.0020	-.0030	.0034	-.0206	.0008	.0004	.0012	.0010	.0151
1187	5.9999	3.07	2.82	.0805	.0134	-.0007	-.0033	.0035	-.0216	.0008	.0004	.0012	.0010	.0167
1188	6.6745	3.08	3.88	.1076	.0161	-.0033	-.0033	.0033	-.0219	.0008	.0004	.0012	.0010	.0194
1189	6.7356	3.08	4.76	.1309	.0194	-.0051	-.0036	.0034	-.0222	.0008	.0004	.0012	.0010	.0228
1190	6.4708	3.08	5.80	.1579	.0244	-.0068	-.0039	.0036	-.0221	.0008	.0004	.0012	.0010	.0277
1191	5.6930	3.08	7.82	.2098	.0369	-.0087	-.0047	.0040	-.0221	.0008	.0004	.0011	.0010	.0401
1192	4.8581	3.10	9.89	.2608	.0537	-.0099	-.0048	.0039	-.0232	.0008	.0004	.0011	.0010	.0569
1193	4.2181	3.12	11.85	.3085	.0731	-.0105	-.0050	.0038	-.0243	.0008	.0004	.0011	.0009	.0764
1194	3.6906	3.13	13.87	.3561	.0965	-.0103	-.0057	.0039	-.0243	.0009	.0005	.0010	.0009	.0998

TABLE AIII.- Continued

UPWT PROJECT 1239

BATCH 15

RUN 81

MACH 2.96

BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW

PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
1226	.998	.00	-4.06	-.0808	.0106	.0134	.0000	-.0002	.0002	.0005	.0003	.0008	.0009	.0130
1227	1.000	.00	-2.06	-.0364	.0103	.0098	.0000	-.0002	.0002	.0005	.0003	.0007	.0009	.0127
1228	.998	.00	-1.04	-.0136	.0100	.0078	-.0000	-.0001	.0000	.0005	.0003	.0007	.0009	.0124
1229	.998	.00	-.01	.0099	.0098	.0054	-.0001	-.0001	.0000	.0005	.0003	.0007	.0009	.0122
1230	.998	.01	1.00	.0329	.0095	.0031	-.0001	-.0002	.0001	.0005	.0003	.0007	.0009	.0118
1231	.998	.01	2.02	.0552	.0092	.0010	-.0001	-.0002	.0000	.0005	.0003	.0007	.0009	.0116
1232	.998	.01	2.94	.0759	.0089	-.0009	-.0001	-.0002	-.0000	.0005	.0003	.0007	.0009	.0113
1233	.999	.01	3.98	.0985	.0086	-.0028	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0110
1234	.998	.01	4.91	.1185	.0083	-.0041	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0107
1235	.999	.01	5.95	.1415	.0081	-.0054	-.0001	-.0001	-.0004	.0005	.0003	.0007	.0009	.0105
1236	.998	.01	7.96	.1858	.0081	-.0070	-.0001	-.0001	-.0006	.0005	.0003	.0007	.0009	.0104
1237	.999	.01	9.93	.2289	.0081	-.0077	-.0000	-.0001	-.0008	.0005	.0003	.0007	.0009	.0105
1238	.998	.01	11.98	.2754	.0083	-.0078	-.0000	-.0000	-.0011	.0006	.0003	.0007	.0009	.0108
1239	.998	.01	13.96	.3200	.0086	-.0071	.0000	.0000	-.0012	.0006	.0003	.0007	.0009	.0111

UPWT PROJECT 1239

BATCH 15

RUN 81

MACH 2.96

STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW

PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1226	-4.8919	.00	-4.06	-.0796	.0163	.0134	.0000	-.0002	.0002	.0005	.0003	.0008	.0009	.0187
1227	-3.1067	.00	-2.06	-.0359	.0116	.0098	.0000	-.0002	.0002	.0005	.0003	.0007	.0009	.0140
1228	-1.2948	.00	-1.04	-.0133	.0103	.0078	-.0000	-.0001	.0000	.0005	.0003	.0007	.0009	.0127
1229	1.0149	.00	-.01	.0099	.0098	.0054	-.0001	-.0001	.0000	.0005	.0003	.0007	.0009	.0122
1230	3.2535	.01	1.00	.0327	.0100	.0031	-.0001	-.0002	.0001	.0005	.0003	.0007	.0009	.0124
1231	4.9286	.01	2.02	.0548	.0111	.0010	-.0001	-.0002	.0000	.0005	.0003	.0007	.0009	.0135
1232	5.8812	.01	2.94	.0752	.0128	-.0009	-.0001	-.0002	-.0000	.0005	.0003	.0007	.0009	.0152
1233	6.3197	.01	3.98	.0975	.0154	-.0028	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0178
1234	6.3547	.01	4.91	.1171	.0184	-.0041	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0208
1235	6.1513	.01	5.95	.1396	.0227	-.0054	-.0001	-.0001	-.0004	.0005	.0003	.0007	.0009	.0251
1236	5.4167	.01	7.96	.1825	.0337	-.0070	-.0001	-.0001	-.0006	.0005	.0003	.0007	.0009	.0360
1237	4.7102	.01	9.93	.2236	.0475	-.0077	-.0000	-.0001	-.0008	.0005	.0003	.0007	.0009	.0498
1238	4.0917	.01	11.98	.2671	.0653	-.0078	-.0000	-.0000	-.0011	.0006	.0003	.0007	.0008	.0677
1239	3.5978	.01	13.96	.3077	.0855	-.0071	.0000	.0000	-.0012	.0006	.0003	.0007	.0008	.0880

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 15			RUN 82		MACH 2.96				
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
1241	1.000	3.06	-4.13	-.0828	.0107	.0130	-.0005	.0019	-.0185	.0006	.0003	.0008	.0009	.0132
1242	1.000	3.04	-2.04	-.0378	.0104	.0097	-.0006	.0023	-.0182	.0005	.0003	.0007	.0009	.0129
1243	1.000	3.04	-1.03	-.0154	.0103	.0078	-.0007	.0024	-.0181	.0005	.0003	.0007	.0009	.0127
1244	1.001	3.04	-.07	.0060	.0101	.0058	-.0007	.0022	-.0179	.0005	.0003	.0007	.0009	.0125
1245	1.000	3.05	.96	.0287	.0097	.0038	-.0006	.0019	-.0178	.0005	.0003	.0007	.0009	.0121
1246	.999	3.06	1.94	.0508	.0094	.0017	-.0007	.0016	-.0177	.0005	.0003	.0007	.0009	.0118
1247	1.001	3.07	2.94	.0728	.0091	-.0003	-.0007	.0013	-.0181	.0005	.0003	.0007	.0009	.0115
1248	1.001	3.08	3.93	.0947	.0087	-.0020	-.0008	.0012	-.0186	.0005	.0003	.0007	.0009	.0111
1249	1.001	3.09	4.95	.1172	.0086	-.0035	-.0013	.0013	-.0195	.0005	.0003	.0007	.0009	.0110
1250	1.001	3.09	5.95	.1396	.0085	-.0045	-.0018	.0014	-.0198	.0005	.0003	.0007	.0009	.0109
1251	1.001	3.09	8.02	.1850	.0083	-.0061	-.0025	.0013	-.0200	.0005	.0003	.0007	.0009	.0107
1252	1.000	3.10	10.03	.2296	.0082	-.0069	-.0032	.0011	-.0206	.0005	.0003	.0007	.0009	.0106
1253	1.001	3.12	11.96	.2734	.0083	-.0070	-.0039	.0008	-.0213	.0006	.0003	.0007	.0009	.0108
1254	1.000	3.13	13.94	.3190	.0086	-.0064	-.0048	.0006	-.0214	.0006	.0003	.0007	.0009	.0111

UPWT PROJECT 1239				BATCH 15				RUN 82		MACH 2.96				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI*	CD UNC
1241	-4.8974	3.06	-4.13	-.0815	.0166	.0130	-.0006	.0019	-.0185	.0006	.0003	.0008	.0009	.0191
1242	-3.1677	3.04	-2.04	-.0373	.0118	.0097	-.0007	.0023	-.0182	.0005	.0003	.0007	.0009	.0142
1243	-1.4383	3.04	-1.03	-.0152	.0105	.0078	-.0007	.0024	-.0181	.0005	.0003	.0007	.0009	.0130
1244	.5973	3.04	-.07	.0060	.0101	.0058	-.0007	.0022	-.0179	.0005	.0003	.0007	.0009	.0125
1245	2.7879	3.05	.96	.0285	.0102	.0038	-.0006	.0019	-.0178	.0005	.0003	.0007	.0009	.0126
1246	4.5328	3.06	1.94	.0504	.0111	.0017	-.0006	.0016	-.0177	.0005	.0003	.0007	.0009	.0135
1247	5.6466	3.07	2.94	.0721	.0128	-.0003	-.0007	.0014	-.0181	.0005	.0003	.0007	.0009	.0152
1248	6.1585	3.08	3.93	.0937	.0152	-.0020	-.0008	.0012	-.0186	.0005	.0003	.0007	.0009	.0176
1249	6.1972	3.09	4.95	.1158	.0187	-.0035	-.0012	.0014	-.0195	.0005	.0003	.0007	.0009	.0211
1250	6.0082	3.09	5.95	.1377	.0229	-.0045	-.0017	.0016	-.0198	.0005	.0003	.0007	.0009	.0253
1251	5.3437	3.09	8.02	.1816	.0340	-.0061	-.0023	.0017	-.0200	.0005	.0003	.0007	.0009	.0363
1252	4.6604	3.10	10.03	.2241	.0481	-.0069	-.0030	.0017	-.0206	.0005	.0003	.0007	.0009	.0505
1253	4.0897	3.12	11.96	.2651	.0648	-.0070	-.0037	.0016	-.0213	.0006	.0003	.0007	.0008	.0672
1254	3.6029	3.13	13.94	.3069	.0852	-.0064	-.0045	.0016	-.0214	.0006	.0003	.0007	.0008	.0876

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 15			RUN 86		MACH 3.30				
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
1286	.999	.00	-4.11	-.0736	.0098	.0113	.0001	-.0002	.0002	.0004	.0003	.0007	.0008	.0119
1287	.998	.01	-2.10	-.0331	.0095	.0081	.0001	-.0002	.0002	.0004	.0003	.0006	.0008	.0116
1288	.999	.01	-1.13	-.0144	.0093	.0066	.0001	-.0003	.0003	.0004	.0003	.0006	.0008	.0114
1289	.999	.00	-.12	.0066	.0092	.0048	.0000	-.0002	.0002	.0004	.0003	.0006	.0008	.0112
1290	.999	.01	.90	.0269	.0089	.0030	.0001	-.0002	.0001	.0004	.0003	.0006	.0008	.0110
1291	.999	.01	1.90	.0474	.0087	.0012	.0000	-.0003	.0001	.0004	.0003	.0006	.0008	.0108
1292	.999	.01	2.87	.0668	.0085	-.0005	.0000	-.0003	.0001	.0004	.0003	.0006	.0008	.0106
1293	.999	.01	3.88	.0868	.0083	-.0020	-.0000	-.0003	-.0001	.0004	.0003	.0006	.0008	.0104
1294	.999	.01	4.92	.1071	.0081	-.0033	.0000	-.0002	-.0001	.0004	.0003	.0006	.0008	.0102
1295	.998	.01	5.90	.1272	.0080	-.0044	-.0001	-.0001	-.0003	.0004	.0003	.0005	.0008	.0100
1296	.999	.01	7.88	.1674	.0080	-.0059	-.0001	-.0001	-.0004	.0004	.0002	.0005	.0008	.0100
1297	.999	.01	9.95	.2101	.0081	-.0067	-.0001	-.0000	-.0007	.0004	.0003	.0005	.0008	.0101
1298	.998	.01	11.95	.2519	.0083	-.0070	-.0002	.0000	-.0010	.0005	.0003	.0005	.0008	.0104
1299	1.000	.01	13.92	.2947	.0087	-.0065	-.0001	.0001	-.0010	.0005	.0003	.0006	.0008	.0109

UPWT PROJECT 1239				BATCH 15				RUN 86		MACH 3.30				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1286	-4.8166	.00	-4.11	-.0725	.0150	.0113	.0001	-.0002	.0002	.0004	.0003	.0006	.0008	.0172
1287	-3.0415	.01	-2.10	-.0326	.0107	.0081	.0001	-.0002	.0002	.0004	.0003	.0006	.0008	.0128
1288	-1.4686	.01	-1.13	-.0141	.0096	.0066	.0001	-.0003	.0003	.0004	.0003	.0006	.0008	.0117
1289	.7255	.00	-.12	.0066	.0092	.0048	.0000	-.0002	.0002	.0004	.0003	.0006	.0008	.0112
1290	2.8603	.01	.90	.0268	.0094	.0030	.0001	-.0002	.0001	.0004	.0003	.0006	.0008	.0114
1291	4.5666	.01	1.90	.0470	.0103	.0012	.0000	-.0003	.0001	.0004	.0003	.0006	.0008	.0124
1292	5.5847	.01	2.87	.0662	.0119	-.0005	.0000	-.0003	.0001	.0004	.0003	.0006	.0008	.0139
1293	6.0586	.01	3.88	.0859	.0142	-.0020	-.0000	-.0003	-.0001	.0004	.0003	.0006	.0008	.0162
1294	6.1146	.01	4.92	.1058	.0173	-.0033	-.0000	-.0002	-.0001	.0004	.0003	.0006	.0008	.0194
1295	5.9610	.01	5.90	.1255	.0210	-.0044	-.0001	-.0001	-.0003	.0004	.0002	.0005	.0008	.0231
1296	5.3255	.01	7.88	.1644	.0309	-.0059	-.0001	-.0001	-.0004	.0004	.0002	.0005	.0008	.0328
1297	4.6349	.01	9.95	.2051	.0443	-.0067	-.0001	-.0000	-.0007	.0004	.0003	.0005	.0008	.0462
1298	4.0489	.01	11.95	.2442	.0603	-.0070	-.0001	.0001	-.0010	.0004	.0003	.0005	.0008	.0624
1299	3.5704	.01	13.92	.2833	.0794	-.0065	-.0001	.0001	-.0010	.0005	.0003	.0005	.0008	.0815

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 15				RUN 87				MACH 3.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
1301	.999	3.07	-4.06	-.0743	.0101	.0112	-.0000	.0007	-.0164	.0004	.0003	.0007	.0008	.0122	
1302	.999	3.06	-2.10	-.0353	.0098	.0084	-.0000	.0010	-.0158	.0004	.0003	.0006	.0008	.0119	
1303	1.000	3.06	-1.09	-.0153	.0097	.0067	.0000	.0010	-.0156	.0004	.0003	.0006	.0008	.0118	
1304	.999	3.06	-.12	.0042	.0094	.0051	.0001	.0008	-.0152	.0004	.0003	.0006	.0008	.0115	
1305	1.000	3.07	.90	.0248	.0092	.0033	.0001	.0005	-.0151	.0004	.0003	.0006	.0008	.0113	
1306	1.000	3.07	1.89	.0446	.0090	.0016	.0001	.0002	-.0151	.0004	.0003	.0006	.0008	.0110	
1307	1.001	3.08	2.90	.0648	.0087	-.0001	.0000	.0001	-.0155	.0004	.0003	.0006	.0008	.0108	
1308	1.000	3.09	3.89	.0849	.0085	-.0015	-.0003	.0002	-.0163	.0004	.0003	.0006	.0008	.0106	
1309	.999	3.09	4.88	.1049	.0084	-.0027	-.0006	.0004	-.0171	.0004	.0003	.0006	.0008	.0104	
1310	.999	3.08	5.94	.1263	.0083	-.0037	-.0010	.0006	-.0179	.0004	.0003	.0005	.0008	.0103	
1311	.999	3.08	7.88	.1650	.0082	-.0050	-.0017	.0009	-.0187	.0004	.0002	.0005	.0008	.0102	
1312	1.000	3.09	9.88	.2067	.0083	-.0059	-.0025	.0010	-.0196	.0004	.0003	.0005	.0008	.0103	
1313	.999	3.09	11.88	.2491	.0085	-.0062	-.0034	.0011	-.0207	.0005	.0003	.0005	.0008	.0105	
1314	1.001	3.09	13.89	.2933	.0088	-.0059	-.0043	.0011	-.0208	.0005	.0003	.0006	.0008	.0110	

UPWT PROJECT 1239				BATCH 15				RUN 87				MACH 3.30			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
1301	-4.7837	3.07	-4.06	-.0731	.0153	.0112	-.0001	.0007	-.0164	.0004	.0003	.0006	.0008	.0175	
1302	-3.1322	3.06	-2.10	-.0347	.0111	.0084	-.0001	.0010	-.0158	.0004	.0003	.0006	.0008	.0132	
1303	-1.5152	3.06	-1.09	-.0151	.0099	.0067	.0000	.0010	-.0156	.0004	.0003	.0006	.0008	.0121	
1304	.4501	3.06	-.12	.0042	.0094	.0051	.0001	.0008	-.0152	.0004	.0003	.0006	.0008	.0115	
1305	2.5732	3.07	.90	.0246	.0096	.0033	.0002	.0005	-.0151	.0004	.0003	.0006	.0008	.0117	
1306	4.2455	3.07	1.89	.0442	.0104	.0016	.0001	.0002	-.0151	.0004	.0003	.0006	.0008	.0125	
1307	5.3654	3.08	2.90	.0642	.0120	-.0001	.0000	.0001	-.0155	.0004	.0003	.0006	.0008	.0140	
1308	5.9036	3.09	3.89	.0840	.0142	-.0015	-.0003	.0002	-.0163	.0004	.0003	.0006	.0008	.0163	
1309	5.9972	3.09	4.88	.1036	.0173	-.0027	-.0006	.0004	-.0171	.0004	.0003	.0006	.0008	.0193	
1310	5.8352	3.08	5.94	.1245	.0213	-.0037	-.0010	.0007	-.0179	.0004	.0002	.0005	.0008	.0234	
1311	5.2628	3.08	7.88	.1620	.0308	-.0050	-.0016	.0011	-.0187	.0004	.0002	.0005	.0008	.0327	
1312	4.6269	3.09	9.88	.2018	.0436	-.0059	-.0023	.0014	-.0196	.0004	.0003	.0005	.0008	.0456	
1313	4.0534	3.09	11.88	.2415	.0596	-.0062	-.0031	.0017	-.0207	.0004	.0003	.0005	.0008	.0616	
1314	3.5712	3.09	13.89	.2820	.0790	-.0059	-.0039	.0021	-.0208	.0005	.0003	.0005	.0008	.0811	

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 16				RUN 88		MACH 2.30					
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
1332	.997	.01	-4.20	-.0961	.0098	.0149	-.0001	-.0002	-.0003	.0007	.0004	.0013	.0010	.0131	
1333	.997	.01	-2.16	-.0447	.0097	.0111	-.0002	-.0002	-.0004	.0007	.0004	.0012	.0010	.0130	
1334	.997	.01	-1.18	-.0202	.0096	.0089	-.0003	-.0002	-.0005	.0007	.0004	.0012	.0010	.0129	
1335	.998	.01	-.19	.0044	.0094	.0067	-.0003	-.0002	-.0005	.0007	.0004	.0012	.0010	.0128	
1336	.998	.02	.84	.0314	.0092	.0041	-.0004	-.0002	-.0007	.0007	.0004	.0012	.0010	.0125	
1337	.998	.01	1.83	.0560	.0088	.0015	-.0003	-.0002	-.0006	.0007	.0004	.0012	.0010	.0121	
1338	.998	.01	2.81	.0806	.0083	-.0008	-.0003	-.0002	-.0007	.0007	.0004	.0012	.0010	.0116	
1339	.998	.02	3.80	.1074	.0077	-.0031	-.0004	-.0002	-.0009	.0007	.0004	.0012	.0010	.0110	
1340	.999	.02	4.82	.1343	.0073	-.0050	-.0003	-.0001	-.0011	.0007	.0004	.0012	.0010	.0105	
1341	.999	.02	5.81	.1607	.0070	-.0064	-.0003	-.0002	-.0012	.0007	.0004	.0012	.0010	.0103	
1342	.999	.02	7.80	.2106	.0075	-.0077	-.0003	-.0002	-.0012	.0007	.0004	.0011	.0010	.0107	
1343	.998	.02	9.80	.2621	.0077	-.0089	-.0003	-.0002	-.0016	.0007	.0004	.0011	.0010	.0109	
1344	.998	.02	11.83	.3153	.0078	-.0096	-.0004	-.0001	-.0019	.0008	.0005	.0011	.0010	.0111	
1345	.998	.03	13.81	.3655	.0079	-.0096	-.0003	-.0001	-.0021	.0009	.0005	.0011	.0010	.0113	

UPWT PROJECT 1239				BATCH 16				RUN 88			MACH 2.30			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1332	-5.6497	.01	-4.20	-.0948	.0168	.0149	-.0001	-.0002	-.0003	.0007	.0004	.0013	.0010	.0201
1333	-3.8751	.01	-2.16	-.0441	.0114	.0111	-.0002	-.0002	-.0004	.0007	.0004	.0012	.0010	.0147
1334	-1.9760	.01	-1.18	-.0198	.0100	.0089	-.0002	-.0002	-.0005	.0007	.0004	.0012	.0010	.0134
1335	.4720	.01	-.19	.0045	.0094	.0067	-.0003	-.0002	-.0005	.0007	.0004	.0012	.0010	.0127
1336	3.2402	.02	.84	.0313	.0096	.0041	-.0004	-.0002	-.0007	.0007	.0004	.0012	.0010	.0130
1337	5.2517	.01	1.83	.0556	.0106	.0015	-.0003	-.0002	-.0006	.0007	.0004	.0012	.0010	.0139
1338	6.5358	.01	2.81	.0799	.0122	-.0008	-.0003	-.0002	-.0007	.0007	.0004	.0012	.0010	.0155
1339	7.1823	.02	3.80	.1064	.0148	-.0031	-.0004	-.0001	-.0009	.0007	.0004	.0012	.0010	.0181
1340	7.1746	.02	4.82	.1329	.0185	-.0050	-.0004	-.0001	-.0011	.0007	.0004	.0012	.0010	.0218
1341	6.8251	.02	5.81	.1588	.0233	-.0064	-.0004	-.0001	-.0012	.0007	.0004	.0012	.0010	.0265
1342	5.7471	.02	7.80	.2071	.0360	-.0077	-.0003	-.0001	-.0012	.0007	.0004	.0011	.0010	.0393
1343	4.9120	.02	9.80	.2563	.0522	-.0089	-.0003	-.0001	-.0016	.0007	.0004	.0011	.0010	.0554
1344	4.2376	.02	11.83	.3062	.0723	-.0096	-.0004	-.0000	-.0019	.0008	.0004	.0011	.0009	.0755
1345	3.7122	.03	13.81	.3521	.0949	-.0096	-.0004	-.0001	-.0021	.0009	.0005	.0010	.0009	.0982

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 16				RUN 89				MACH 2.96			
BODY AXIS		AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
1347	1.000	.01	-4.07	-.0760	.0088	.0104	-.0001	-.0002	-.0002	.0005	.0003	.0008	.0009	.0112	
1348	1.000	.01	-2.10	-.0343	.0088	.0080	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0112	
1349	1.000	.01	-1.07	-.0120	.0087	.0065	-.0001	-.0002	-.0001	.0005	.0003	.0007	.0009	.0111	
1350	.999	.01	-.08	.0094	.0087	.0048	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0110	
1351	1.000	.01	.95	.0320	.0085	.0029	-.0001	-.0001	-.0003	.0005	.0003	.0007	.0009	.0108	
1352	.999	.01	2.00	.0540	.0083	.0011	-.0000	-.0001	-.0004	.0005	.0003	.0007	.0009	.0107	
1353	.999	.01	2.94	.0749	.0081	-.0006	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0105	
1354	.999	.01	3.95	.0964	.0079	-.0021	-.0001	-.0002	-.0006	.0005	.0003	.0007	.0009	.0103	
1355	.999	.01	5.03	.1196	.0077	-.0034	-.0001	-.0002	-.0007	.0005	.0003	.0007	.0009	.0101	
1356	.999	.01	5.98	.1405	.0076	-.0043	-.0001	-.0002	-.0007	.0005	.0003	.0007	.0009	.0099	
1357	1.000	.01	8.00	.1845	.0076	-.0057	-.0001	-.0002	-.0008	.0005	.0003	.0007	.0009	.0099	
1358	.999	.01	9.95	.2271	.0078	-.0063	-.0001	-.0002	-.0009	.0005	.0003	.0007	.0009	.0101	
1359	.999	.02	11.96	.2723	.0080	-.0063	-.0001	-.0002	-.0012	.0006	.0003	.0007	.0009	.0105	
1361	1.000	.02	13.95	.3180	.0083	-.0055	-.0001	-.0001	-.0012	.0006	.0003	.0007	.0009	.0108	

UPWT PROJECT 1239				BATCH 16			RUN 89			MACH 2.96				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1347	-5.2896	.01	-4.07	-.0749	.0142	.0104	-.0001	-.0003	-.0002	.0005	.0003	.0008	.0009	.0166
1348	-3.3719	.01	-2.10	-.0338	.0100	.0080	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0124
1349	-1.3197	.01	-1.07	-.0118	.0089	.0065	-.0001	-.0002	-.0001	.0005	.0003	.0007	.0009	.0113
1350	1.0873	.01	-.08	.0094	.0086	.0048	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0110
1351	3.5287	.01	.95	.0318	.0090	.0029	-.0001	-.0001	-.0003	.0005	.0003	.0007	.0009	.0114
1352	5.2657	.01	2.00	.0536	.0102	.0011	-.0001	-.0001	-.0004	.0005	.0003	.0007	.0009	.0125
1353	6.2209	.01	2.94	.0743	.0119	-.0006	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0143
1354	6.5615	.01	3.95	.0954	.0145	-.0021	-.0001	-.0002	-.0006	.0005	.0003	.0007	.0009	.0169
1355	6.5245	.01	5.03	.1162	.0181	-.0034	-.0001	-.0002	-.0007	.0005	.0003	.0007	.0009	.0205
1356	6.2620	.01	5.98	.1386	.0221	-.0043	-.0001	-.0002	-.0007	.0005	.0003	.0007	.0009	.0245
1357	5.4585	.01	8.00	.1813	.0332	-.0057	-.0001	-.0001	-.0008	.0005	.0003	.0007	.0009	.0355
1358	4.7296	.01	9.95	.2219	.0469	-.0063	-.0001	-.0002	-.0009	.0005	.0003	.0007	.0009	.0492
1359	4.1087	.02	11.96	.2641	.0643	-.0063	-.0001	-.0002	-.0012	.0005	.0003	.0007	.0008	.0667
1361	3.6092	.02	13.95	.3059	.0848	-.0055	-.0001	-.0001	-.0012	.0006	.0003	.0007	.0008	.0872

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 17			RUN 90		MACH 2.30					
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER															
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
1375	.998	.01	-4.18	-.1030	.0092	.0173	-.0000	-.0003	-.0002	.0007	.0004	0.0000	0.0000	.0104	
1376	.998	.01	-2.21	-.0528	.0091	.0140	-.0002	-.0003	-.0002	.0007	.0004	0.0000	0.0000	.0102	
1377	.997	.01	-1.20	-.0277	.0089	.0120	-.0003	-.0003	-.0002	.0007	.0004	0.0000	0.0000	.0100	
1378	.997	.01	-.21	-.0048	.0086	.0099	-.0001	-.0003	-.0003	.0007	.0004	0.0000	0.0000	.0097	
1379	.996	.01	.84	.0228	.0083	.0073	-.0003	-.0003	-.0003	.0007	.0004	0.0000	0.0000	.0094	
1380	.997	.01	1.83	.0468	.0078	.0051	-.0003	-.0003	-.0004	.0007	.0004	0.0000	0.0000	.0089	
1381	.997	.01	2.81	.0715	.0072	.0028	-.0002	-.0002	-.0005	.0007	.0004	0.0000	0.0000	.0083	
1382	.997	.02	3.84	.0985	.0065	.0006	-.0002	-.0003	-.0006	.0007	.0004	0.0000	0.0000	.0077	
1383	.997	.02	4.84	.1246	.0059	-.0011	-.0003	-.0003	-.0007	.0007	.0004	0.0000	0.0000	.0071	
1384	.997	.02	5.78	.1482	.0056	-.0022	-.0003	-.0003	-.0009	.0007	.0004	0.0000	0.0000	.0067	
1385	.997	.02	7.81	.1989	.0059	-.0030	-.0003	-.0002	-.0010	.0007	.0004	0.0000	0.0000	.0070	
1386	.997	.03	9.82	.2492	.0058	-.0032	-.0003	-.0003	-.0013	.0007	.0004	0.0000	0.0000	.0069	
1387	.998	.03	11.89	.3004	.0057	-.0028	-.0003	-.0003	-.0015	.0007	.0005	0.0000	0.0000	.0069	
1388	.997	.03	13.86	.3500	.0056	-.0017	-.0003	-.0004	-.0017	.0008	.0005	0.0000	0.0000	.0069	

UPWT PROJECT 1239					BATCH 17			RUN 90		MACH 2.30				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1375	-6.1121	.01	-4.18	-.1020	.0167	.0173	.0000	-.0003	-.0002	.0007	.0004	0.0000	0.0000	.0178
1376	-4.7210	.01	-2.21	-.0524	.0111	.0140	-.0002	-.0003	-.0002	.0007	.0004	0.0000	0.0000	.0122
1377	-2.9074	.01	-1.20	-.0276	.0095	.0120	-.0003	-.0003	-.0002	.0007	.0004	0.0000	0.0000	.0106
1378	-.5526	.01	-.21	-.0048	.0087	.0099	-.0001	-.0003	-.0003	.0007	.0004	0.0000	0.0000	.0098
1379	2.6312	.01	.84	.0227	.0086	.0073	-.0003	-.0003	-.0003	.0007	.0004	0.0000	0.0000	.0097
1380	5.0251	.01	1.83	.0465	.0093	.0051	-.0003	-.0003	-.0004	.0007	.0004	0.0000	0.0000	.0104
1381	6.6536	.01	2.81	.0711	.0107	.0028	-.0003	-.0002	-.0005	.0007	.0004	0.0000	0.0000	.0118
1382	7.4597	.02	3.84	.0978	.0131	.0006	-.0003	-.0002	-.0006	.0007	.0004	0.0000	0.0000	.0142
1383	7.5242	.02	4.84	.1237	.0164	-.0011	-.0003	-.0002	-.0007	.0007	.0004	0.0000	0.0000	.0175
1384	7.1667	.02	5.78	.1469	.0205	-.0022	-.0004	-.0003	-.0009	.0007	.0004	0.0000	0.0000	.0216
1385	5.9797	.02	7.81	.1962	.0328	-.0030	-.0003	-.0002	-.0010	.0007	.0004	0.0000	0.0000	.0339
1386	5.0707	.03	9.82	.2445	.0482	-.0032	-.0003	-.0003	-.0013	.0007	.0004	0.0000	0.0000	.0493
1387	4.3380	.03	11.89	.2928	.0675	-.0028	-.0004	-.0003	-.0015	.0007	.0004	0.0000	0.0000	.0687
1388	3.7915	.03	13.86	.3385	.0893	-.0017	-.0004	-.0003	-.0017	.0008	.0005	0.0000	0.0000	.0906

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 17			RUN 91		MACH 2.96				
BODY AXIS		AXIAL FORCE CORRECTED FOR BASE, CHAMBER												
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
1390	.999	.01	-4.06	-.0797	.0083	.0117	-.0001	-.0003	-.0001	.0005	.0003	0.0000	0.0000	.0091
1391	.999	.01	-2.03	-.0374	.0081	.0096	-.0001	-.0002	-.0002	.0005	.0003	0.0000	0.0000	.0089
1392	1.000	.01	-1.10	-.0176	.0080	.0084	-.0001	-.0002	-.0001	.0005	.0003	0.0000	0.0000	.0087
1393	1.000	.01	-.05	.0045	.0078	.0069	-.0001	-.0002	-.0002	.0005	.0003	0.0000	0.0000	.0085
1394	.999	.01	.93	.0253	.0075	.0054	-.0001	-.0002	-.0002	.0005	.0003	0.0000	0.0000	.0083
1395	1.000	.01	1.92	.0461	.0072	.0039	-.0001	-.0002	-.0003	.0005	.0003	0.0000	0.0000	.0080
1396	1.000	.01	2.92	.0671	.0069	.0025	-.0001	-.0002	-.0003	.0005	.0003	0.0000	0.0000	.0077
1397	1.000	.01	3.96	.0890	.0066	.0012	-.0001	-.0002	-.0004	.0005	.0003	0.0000	0.0000	.0074
1398	1.000	.01	4.95	.1094	.0063	.0003	-.0001	-.0002	-.0005	.0005	.0003	0.0000	0.0000	.0071
1399	1.000	.01	5.95	.1303	.0060	-.0002	-.0001	-.0002	-.0005	.0005	.0003	0.0000	0.0000	.0068
1400	.999	.02	7.92	.1718	.0058	-.0007	-.0001	-.0003	-.0007	.0005	.0003	0.0000	0.0000	.0066
1401	1.000	.02	9.94	.2139	.0056	-.0004	-.0001	-.0003	-.0009	.0005	.0003	0.0000	0.0000	.0065
1402	1.000	.02	11.95	.2571	.0056	.0004	-.0001	-.0003	-.0012	.0005	.0003	0.0000	0.0000	.0064
1403	1.000	.02	13.92	.3018	.0056	.0017	-.0002	-.0002	-.0012	.0006	.0003	0.0000	0.0000	.0066

UPWT PROJECT 1239					BATCH 17			RUN 91		MACH 2.96				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1390	-5.6710	.01	-4.06	-.0789	.0139	.0117	-.0001	-.0003	-.0001	.0005	.0003	0.0000	0.0000	.0147
1391	-3.9325	.01	-2.03	-.0370	.0094	.0096	-.0001	-.0002	-.0002	.0005	.0003	0.0000	0.0000	.0102
1392	-2.1044	.01	-1.10	-.0175	.0083	.0084	-.0001	-.0002	-.0001	.0005	.0003	0.0000	0.0000	.0091
1393	.5828	.01	-.05	.0045	.0077	.0069	-.0001	-.0002	-.0002	.0005	.0003	0.0000	0.0000	.0085
1394	3.1784	.01	.93	.0251	.0079	.0054	-.0001	-.0002	-.0002	.0005	.0003	0.0000	0.0000	.0087
1395	5.2273	.01	1.92	.0458	.0088	.0039	-.0001	-.0002	-.0003	.0005	.0003	0.0000	0.0000	.0096
1396	6.4414	.01	2.92	.0667	.0103	.0025	-.0001	-.0002	-.0003	.0005	.0003	0.0000	0.0000	.0112
1397	6.9420	.01	3.96	.0883	.0127	.0012	-.0001	-.0002	-.0004	.0005	.0003	0.0000	0.0000	.0135
1398	6.9137	.01	4.95	.1084	.0157	.0003	-.0001	-.0002	-.0005	.0005	.0003	0.0000	0.0000	.0165
1399	6.6194	.01	5.95	.1290	.0195	-.0002	-.0001	-.0002	-.0005	.0005	.0003	0.0000	0.0000	.0203
1400	5.7571	.02	7.92	.1694	.0294	-.0007	-.0002	-.0003	-.0007	.0005	.0003	0.0000	0.0000	.0302
1401	4.9381	.02	9.94	.2098	.0425	-.0004	-.0001	-.0002	-.0009	.0005	.0003	0.0000	0.0000	.0433
1402	4.2672	.02	11.95	.2504	.0587	.0004	-.0002	-.0002	-.0012	.0005	.0003	0.0000	0.0000	.0595
1403	3.7359	.02	13.92	.2916	.0780	.0017	-.0002	-.0002	-.0012	.0006	.0003	0.0000	0.0000	.0790

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 19				RUN 94				MACH 2.30			
BODY AXIS		AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
1443	.999	-.01	-4.25	-.1048	.0124	.0180	.0001	-.0001	-.0005	.0007	.0004	.0013	.0010	.0158	
1444	.999	-.01	-2.24	-.0512	.0122	.0137	-.0000	-.0001	-.0003	.0007	.0004	.0012	.0010	.0155	
1445	.999	-.01	-1.18	-.0240	.0120	.0109	-.0001	.0000	-.0007	.0007	.0004	.0012	.0010	.0153	
1446	.998	-.01	-.23	.0011	.0118	.0081	-.0002	.0001	-.0009	.0007	.0004	.0012	.0010	.0151	
1447	.998	-.01	.83	.0281	.0115	.0052	-.0002	.0000	-.0008	.0007	.0004	.0012	.0010	.0148	
1448	.999	-.01	1.82	.0545	.0110	.0026	-.0003	.0000	-.0009	.0007	.0004	.0012	.0010	.0143	
1449	.999	-.01	2.83	.0805	.0104	-.0001	-.0003	.0001	-.0012	.0007	.0004	.0012	.0010	.0137	
1450	.998	-.01	3.87	.1089	.0096	-.0025	-.0003	.0001	-.0012	.0007	.0004	.0012	.0010	.0129	
1451	.998	-.01	4.82	.1344	.0090	-.0043	-.0004	.0000	-.0012	.0007	.0004	.0012	.0010	.0123	
1452	.998	-.01	5.91	.1643	.0086	-.0057	-.0004	.0002	-.0015	.0007	.0004	.0012	.0010	.0119	
1453	.997	-.01	7.84	.2146	.0089	-.0066	-.0004	.0001	-.0016	.0007	.0004	.0011	.0010	.0121	
1454	.997	-.01	9.83	.2661	.0087	-.0067	-.0004	.0001	-.0017	.0008	.0004	.0011	.0010	.0120	
1455	.998	-.01	11.85	.3192	.0089	-.0061	-.0005	.0003	-.0019	.0008	.0005	.0011	.0010	.0122	
1456	.997	-.01	13.81	.3701	.0091	-.0045	-.0005	.0004	-.0022	.0009	.0005	.0011	.0010	.0125	

UPWT PROJECT 1239				BATCH 19				RUN 94				MACH 2.30			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
1443	-5.1265	-.01	-4.25	-.1032	.0201	.0180	.0001	-.0001	-.0005	.0007	.0004	.0013	.0010	.0235	
1444	-3.5566	-.01	-2.24	-.0505	.0142	.0137	-.0000	-.0001	-.0003	.0007	.0004	.0012	.0010	.0175	
1445	-1.8928	-.01	-1.18	-.0237	.0125	.0109	-.0001	.0000	-.0007	.0007	.0004	.0012	.0010	.0158	
1446	.1050	-.01	-.23	.0012	.0118	.0081	-.0002	.0001	-.0009	.0007	.0004	.0012	.0010	.0151	
1447	2.3548	-.01	.83	.0279	.0119	.0052	-.0002	.0000	-.0008	.0007	.0004	.0012	.0010	.0152	
1448	4.2489	-.01	1.82	.0540	.0127	.0026	-.0003	.0001	-.0009	.0007	.0004	.0012	.0010	.0160	
1449	5.5620	-.01	2.83	.0797	.0143	-.0001	-.0003	.0001	-.0012	.0007	.0004	.0012	.0010	.0176	
1450	6.3601	-.01	3.87	.1078	.0169	-.0025	-.0003	.0001	-.0012	.0007	.0004	.0012	.0010	.0202	
1451	6.5593	-.01	4.82	.1329	.0203	-.0043	-.0003	.0001	-.0012	.0007	.0004	.0012	.0010	.0235	
1452	6.3691	-.01	5.91	.1621	.0255	-.0057	-.0004	.0002	-.0015	.0007	.0004	.0011	.0010	.0287	
1453	5.5412	-.01	7.84	.2109	.0381	-.0066	-.0004	.0002	-.0016	.0007	.0004	.0011	.0010	.0413	
1454	4.8128	-.01	9.83	.2600	.0540	-.0067	-.0003	.0002	-.0017	.0007	.0004	.0011	.0009	.0572	
1455	4.1748	-.01	11.85	.3098	.0742	-.0061	-.0004	.0004	-.0019	.0008	.0004	.0011	.0009	.0775	
1456	3.6653	-.01	13.81	.3563	.0972	-.0045	-.0004	.0005	-.0022	.0009	.0005	.0010	.0009	.1005	

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 19				RUN 95				MACH 2.96			
BODY AXIS		AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
1458	1.001	-.01	-4.14	-.0827	.0114	.0131	.0000	-.0001	-.0003	.0005	.0003	.0008	.0009	.0138	
1459	1.001	-.01	-2.08	-.0371	.0111	.0099	-.0001	-.0001	-.0003	.0005	.0003	.0007	.0009	.0135	
1460	1.000	-.01	-1.11	-.0153	.0109	.0080	-.0001	-.0000	-.0004	.0005	.0003	.0007	.0009	.0133	
1461	1.001	-.01	.02	.0104	.0107	.0056	-.0001	-.0000	-.0004	.0005	.0003	.0007	.0009	.0131	
1462	1.000	-.01	.96	.0319	.0105	.0035	-.0001	-.0001	-.0004	.0005	.0003	.0007	.0009	.0129	
1463	1.000	-.01	1.94	.0536	.0103	.0016	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0127	
1464	1.001	-.01	2.97	.0761	.0101	-.0001	-.0000	-.0002	-.0002	.0005	.0003	.0007	.0009	.0125	
1465	1.000	-.01	3.92	.0969	.0098	-.0015	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0122	
1466	1.001	-.01	4.98	.1205	.0094	-.0026	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0118	
1467	1.000	-.01	5.99	.1430	.0091	-.0034	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0115	
1468	1.000	-.01	7.95	.1871	.0089	-.0042	-.0002	-.0000	-.0008	.0005	.0003	.0007	.0009	.0112	
1469	1.001	-.01	9.91	.2305	.0089	-.0037	-.0002	-.0000	-.0008	.0005	.0003	.0007	.0009	.0113	
1470	1.001	-.01	11.94	.2761	.0091	-.0024	-.0002	.0001	-.0010	.0006	.0003	.0007	.0009	.0116	
1471	1.001	-.01	13.96	.3228	.0095	-.0005	-.0002	.0001	-.0013	.0006	.0003	.0007	.0009	.0121	

APPENDIX A

UPWT PROJECT 1239				BATCH 19				RUN 95				MACH 2.96			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
1458	-4.7000	-.01	-4.14	-.0814	.0173	.0131	.0000	-.0001	-.0003	.0005	.0003	.0008	.0009	.0197	
1459	-2.9375	-.01	-2.08	-.0365	.0124	.0099	-.0001	-.0001	-.0003	.0005	.0003	.0007	.0009	.0148	
1460	-1.3396	-.01	-1.11	-.0150	.0112	.0080	-.0001	-.0001	-.0004	.0005	.0003	.0007	.0009	.0136	
1461	.9707	-.01	.02	.0104	.0107	.0055	-.0001	-.0000	-.0004	.0005	.0003	.0007	.0009	.0131	
1462	2.8646	-.01	.96	.0317	.0111	.0035	-.0001	-.0001	-.0004	.0005	.0003	.0007	.0009	.0134	
1463	4.3718	-.01	1.94	.0531	.0122	.0016	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0145	
1464	5.3706	-.01	2.97	.0754	.0140	-.0001	-.0000	-.0002	-.0002	.0005	.0003	.0007	.0009	.0164	
1465	5.8412	-.01	3.92	.0958	.0164	-.0015	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0188	
1466	6.0052	-.01	4.98	.1190	.0198	-.0026	-.0001	-.0001	-.0005	.0005	.0003	.0007	.0009	.0222	
1467	5.8852	-.01	5.99	.1410	.0240	-.0034	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0263	
1468	5.2967	-.01	7.95	.1837	.0347	-.0042	-.0002	-.0000	-.0008	.0005	.0003	.0007	.0009	.0370	
1469	4.6459	-.01	9.91	.2250	.0484	-.0037	-.0002	.0000	-.0008	.0005	.0003	.0007	.0009	.0508	
1470	4.0513	-.01	11.94	.2677	.0561	-.0024	-.0002	.0001	-.0010	.0006	.0003	.0007	.0008	.0685	
1471	3.5597	-.01	13.96	.3102	.0771	-.0005	-.0002	.0001	-.0013	.0006	.0003	.0007	.0008	.0896	

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 19				RUN 96				MACH 3.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
1473	1.000	-.01	-4.10	-.0746	.0106	.0112	.0001	-.0002	.0000	.0004	.0003	.0007	.0008	.0127	
1474	.999	-.01	-2.13	-.0347	.0104	.0084	.0001	-.0002	.0000	.0004	.0003	.0006	.0008	.0125	
1475	.998	-.01	-1.16	-.0148	.0103	.0068	.0001	-.0003	.0000	.0004	.0003	.0006	.0008	.0123	
1476	.999	-.01	-.11	.0060	.0101	.0051	.0000	-.0002	-.0001	.0004	.0003	.0006	.0008	.0122	
1477	1.001	-.01	.92	.0268	.0100	.0033	.0000	-.0002	-.0002	.0004	.0003	.0006	.0008	.0121	
1478	.999	-.01	1.91	.0469	.0099	.0018	.0000	-.0003	-.0001	.0004	.0003	.0006	.0008	.0119	
1479	1.000	-.01	2.89	.0667	.0097	.0004	-.0000	-.0003	-.0002	.0004	.0003	.0006	.0008	.0117	
1480	1.000	-.01	3.90	.0870	.0094	-.0008	-.0000	-.0002	-.0002	.0004	.0003	.0006	.0008	.0115	
1481	1.000	-.01	4.89	.1068	.0092	-.0018	-.0000	-.0002	-.0003	.0004	.0003	.0006	.0008	.0113	
1482	1.000	-.01	5.96	.1287	.0089	-.0027	-.0001	-.0002	-.0004	.0004	.0003	.0005	.0008	.0110	
1483	.999	-.01	7.95	.1700	.0088	-.0034	-.0001	-.0001	-.0005	.0004	.0002	.0005	.0008	.0108	
1484	.999	-.01	9.88	.2105	.0088	-.0033	-.0002	-.0001	-.0006	.0004	.0003	.0005	.0008	.0109	
1485	1.000	-.01	11.95	.2537	.0092	-.0022	-.0002	.0000	-.0006	.0005	.0003	.0005	.0008	.0113	
1486	.999	-.01	13.94	.2976	.0097	-.0010	-.0002	-.0000	-.0009	.0005	.0003	.0006	.0008	.0118	

UPWT PROJECT 1239					BATCH 19			RUN 96			MACH 3.30			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1473	-4.6235	-.01	-4.10	-.0735	.0159	.0112	.0001	-.0002	.0000	.0004	.0003	.0006	.0008	.0180
1474	-2.9334	-.01	-2.13	-.0342	.0117	.0084	.0001	-.0002	.0000	.0004	.0003	.0006	.0008	.0137
1475	-1.3776	-.01	-1.16	-.0145	.0106	.0068	.0001	-.0003	.0000	.0004	.0003	.0006	.0008	.0126
1476	.5991	-.01	-.11	.0061	.0101	.0051	.0000	-.0002	-.0001	.0004	.0003	.0006	.0008	.0122
1477	2.5527	-.01	.92	.0266	.0104	.0033	.0000	-.0002	-.0002	.0004	.0003	.0006	.0008	.0125
1478	4.0681	-.01	1.91	.0465	.0114	.0018	.0000	-.0003	-.0001	.0004	.0003	.0006	.0008	.0135
1479	5.0677	-.01	2.89	.0660	.0130	.0004	-.0000	-.0003	-.0002	.0004	.0003	.0006	.0008	.0151
1480	5.6085	-.01	3.90	.0860	.0153	-.0008	-.0001	-.0002	-.0002	.0004	.0003	.0006	.0008	.0174
1481	5.7702	-.01	4.89	.1054	.0183	-.0018	-.0001	-.0002	-.0003	.0004	.0003	.0006	.0008	.0203
1482	5.6976	-.01	5.96	.1268	.0223	-.0027	-.0001	-.0002	-.0004	.0004	.0002	.0005	.0008	.0243
1483	5.1771	-.01	7.95	.1668	.0322	-.0034	-.0001	-.0001	-.0005	.0004	.0002	.0005	.0008	.0342
1484	4.5817	-.01	9.88	.2054	.0448	-.0033	-.0002	-.0001	-.0006	.0004	.0003	.0005	.0008	.0468
1485	3.9946	-.01	11.95	.2457	.0615	-.0022	.0000	-.0000	-.0006	.0005	.0003	.0005	.0008	.0636
1486	3.5273	-.01	13.94	.2859	.0811	-.0010	-.0002	-.0000	-.0009	.0005	.0003	.0005	.0008	.0832

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 20			RUN 97		MACH 2.30				
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
1502	.996	-.01	-4.20	-.0975	.0101	.0146	-.0001	-.0003	-.0003	.0007	.0004	.0013	.0010	.0135
1503	1.000	-.01	-2.20	-.0470	.0102	.0112	-.0002	-.0002	-.0004	.0007	.0004	.0012	.0010	.0135
1504	.999	-.01	-1.22	-.0221	.0101	.0092	-.0001	-.0002	-.0004	.0007	.0004	.0012	.0010	.0134
1505	.996	-.01	-.18	.0047	.0100	.0068	-.0002	-.0002	-.0005	.0007	.0004	.0012	.0010	.0133
1506	.996	-.01	.83	.0301	.0099	.0044	-.0003	-.0002	-.0006	.0007	.0004	.0012	.0010	.0132
1507	.996	-.01	1.80	.0539	.0096	.0022	-.0003	-.0002	-.0006	.0007	.0004	.0012	.0010	.0129
1508	.995	-.01	2.81	.0802	.0091	.0001	-.0003	-.0002	-.0007	.0007	.0004	.0012	.0010	.0124
1509	.995	-.00	3.85	.1074	.0086	-.0019	-.0003	-.0001	-.0009	.0007	.0004	.0012	.0010	.0119
1510	.994	-.00	4.82	.1323	.0081	-.0034	-.0003	-.0001	-.0010	.0007	.0004	.0012	.0010	.0114
1511	.995	-.00	5.82	.1592	.0079	-.0044	-.0003	-.0002	-.0010	.0007	.0004	.0012	.0010	.0111
1512	.995	-.00	7.77	.2099	.0082	-.0051	-.0003	-.0002	-.0011	.0007	.0004	.0011	.0010	.0114
1513	.996	-.00	9.81	.2628	.0083	-.0049	-.0004	-.0001	-.0014	.0008	.0004	.0011	.0010	.0115
1514	.996	-.00	11.84	.3156	.0085	-.0041	-.0003	-.0000	-.0013	.0008	.0005	.0011	.0010	.0118
1515	.996	-.00	13.82	.3666	.0088	-.0027	-.0004	.0000	-.0015	.0009	.0005	.0011	.0010	.0122

UPWT PROJECT 1239					BATCH 20			RUN 97			MACH 2.30			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1502	-5.5849	-.01	-4.20	-.0962	.0172	.0146	-.0000	-.0003	-.0003	.0007	.0004	.0013	.0010	.0206
1503	-3.8785	-.01	-2.20	-.0464	.0120	.0112	-.0002	-.0002	-.0004	.0007	.0004	.0012	.0010	.0153
1504	-2.0583	-.01	-1.22	-.0218	.0106	.0092	-.0001	-.0002	-.0004	.0007	.0004	.0012	.0010	.0139
1505	.4820	-.01	-.18	.0048	.0100	.0068	-.0002	-.0002	-.0005	.0007	.0004	.0012	.0010	.0133
1506	2.9047	-.01	.83	.0299	.0103	.0044	-.0003	-.0002	-.0006	.0007	.0004	.0012	.0010	.0136
1507	4.7381	-.01	1.80	.0535	.0113	.0022	-.0003	-.0002	-.0006	.0007	.0004	.0012	.0010	.0146
1508	6.0865	-.01	2.81	.0794	.0131	.0001	-.0003	-.0002	-.0007	.0007	.0004	.0012	.0010	.0164
1509	6.7361	-.00	3.85	.1063	.0158	-.0019	-.0003	-.0001	-.0009	.0007	.0004	.0012	.0010	.0191
1510	6.8054	-.00	4.82	.1308	.0192	-.0034	-.0003	-.0001	-.0010	.0007	.0004	.0012	.0010	.0225
1511	6.5555	-.00	5.82	.1571	.0240	-.0044	-.0003	-.0001	-.0010	.0007	.0004	.0012	.0010	.0272
1512	5.6491	-.00	7.77	.2063	.0365	-.0051	-.0003	-.0002	-.0011	.0007	.0004	.0011	.0010	.0397
1513	4.8550	-.00	9.81	.2569	.0529	-.0049	-.0004	-.0000	-.0014	.0007	.0004	.0011	.0010	.0561
1514	4.1939	-.00	11.84	.3063	.0730	-.0041	-.0003	.0000	-.0013	.0008	.0004	.0011	.0009	.0763
1515	3.6721	-.00	13.82	.3529	.0961	-.0027	-.0004	.0001	-.0015	.0009	.0005	.0010	.0009	.0994

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 20				RUN 98		MACH 2.30				
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
1517	.996	3.18	-4.18	-.0977	.0102	.0142	.0011	-.0028	-.0105	.0008	.0004	.0013	.0010	.0137
1518	.998	3.15	-2.21	-.0481	.0103	.0109	.0003	-.0022	-.0106	.0008	.0004	.0012	.0010	.0137
1519	.996	3.15	-1.20	-.0216	.0103	.0088	-.0002	-.0019	-.0108	.0008	.0004	.0012	.0010	.0137
1520	.996	3.14	-.18	.0040	.0102	.0066	-.0007	-.0018	-.0110	.0008	.0004	.0012	.0010	.0136
1521	.997	3.15	.81	.0285	.0100	.0046	-.0012	-.0017	-.0113	.0008	.0004	.0012	.0010	.0134
1522	.997	3.15	1.87	.0549	.0097	.0023	-.0017	-.0016	-.0121	.0008	.0004	.0012	.0010	.0131
1523	.996	3.15	2.80	.0786	.0093	.0005	-.0022	-.0014	-.0127	.0008	.0004	.0012	.0010	.0127
1524	.997	3.15	3.80	.1042	.0089	-.0012	-.0025	-.0013	-.0132	.0008	.0004	.0012	.0010	.0122
1525	.996	3.15	4.82	.1314	.0087	-.0026	-.0029	-.0014	-.0128	.0008	.0004	.0012	.0010	.0121
1526	.996	3.13	5.87	.1601	.0086	-.0035	-.0035	-.0013	-.0119	.0008	.0004	.0012	.0010	.0119
1527	.997	3.11	7.80	.2106	.0084	-.0044	-.0046	-.0008	-.0111	.0008	.0004	.0011	.0010	.0117
1528	.997	3.09	9.79	.2625	.0082	-.0044	-.0053	-.0005	-.0103	.0008	.0004	.0011	.0010	.0116
1529	.997	3.07	11.79	.3147	.0084	-.0034	-.0059	-.0003	-.0090	.0008	.0005	.0011	.0010	.0117
1530	.997	3.06	13.84	.3693	.0087	-.0017	-.0066	-.0007	-.0064	.0009	.0005	.0011	.0010	.0122

UPWT PROJECT 1239				BATCH 20				RUN 98				MACH 2.30			
STABILITY AXIS DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
1517	-5.5566	3.18	-4.18	-.0963	.0173	.0142	.0013	-.0027	-.0105	.0006	.0004	.0013	.0010	.0208	
1518	-3.8945	3.15	-2.21	-.0474	.0122	.0109	.0004	-.0021	-.0106	.0008	.0004	.0012	.0010	.0156	
1519	-1.9729	3.15	-1.20	-.0212	.0108	.0088	-.0002	-.0019	-.0108	.0008	.0004	.0012	.0010	.0141	
1520	.4030	3.14	-.18	.0041	.0102	.0066	-.0007	-.0018	-.0110	.0008	.0004	.0012	.0010	.0135	
1521	2.7113	3.15	.81	.0283	.0104	.0046	-.0012	-.0017	-.0113	.0008	.0004	.0012	.0010	.0138	
1522	4.7202	3.15	1.87	.0544	.0115	.0023	-.0018	-.0015	-.0121	.0008	.0004	.0012	.0010	.0149	
1523	5.9228	3.15	2.80	.0779	.0132	.0005	-.0022	-.0013	-.0127	.0008	.0004	.0012	.0010	.0165	
1524	6.5352	3.15	3.80	.1032	.0158	-.0012	-.0026	-.0011	-.0132	.0008	.0004	.0012	.0010	.0191	
1525	6.5772	3.15	4.82	.1299	.0197	-.0026	-.0030	-.0011	-.0128	.0008	.0004	.0012	.0010	.0231	
1526	6.3423	3.13	5.87	.1580	.0249	-.0035	-.0036	-.0009	-.0119	.0008	.0004	.0012	.0010	.0282	
1527	5.6136	3.11	7.80	.2070	.0369	-.0044	-.0047	-.0002	-.0111	.0008	.0004	.0011	.0010	.0402	
1528	4.8654	3.09	9.79	.2566	.0527	-.0044	-.0053	.0004	-.0103	.0008	.0004	.0011	.0010	.0560	
1529	4.2143	3.07	11.79	.3055	.0725	-.0034	-.0058	.0010	-.0090	.0008	.0004	.0011	.0009	.0758	
1530	3.6733	3.06	13.84	.3556	.0968	-.0017	-.0066	.0009	-.0064	.0009	.0005	.0010	.0009	.1001	

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 20			RUN 99		MACH 2.96				
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
1532	.999	-.01	-4.07	-.0763	.0093	.0099	-.0001	-.0003	-.0001	.0005	.0003	.0008	.0009	.0117
1533	1.000	-.01	-2.08	-.0339	.0093	.0078	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0117
1534	1.001	-.01	-1.00	-.0108	.0093	.0062	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0117
1535	1.000	-.01	-.05	.0098	.0093	.0047	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0116
1536	1.000	-.01	.95	.0315	.0092	.0030	-.0001	-.0002	-.0004	.0005	.0003	.0007	.0009	.0116
1537	1.000	-.01	1.92	.0526	.0092	.0014	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0115
1538	.999	-.01	2.92	.0734	.0090	.0001	-.0000	-.0002	-.0005	.0005	.0003	.0007	.0009	.0114
1539	1.000	-.01	3.95	.0961	.0088	-.0011	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0112
1540	.999	-.01	4.93	.1178	.0086	-.0020	-.0001	-.0002	-.0006	.0005	.0003	.0007	.0009	.0109
1541	1.000	-.01	5.94	.1395	.0083	-.0025	-.0001	-.0002	-.0007	.0005	.0003	.0007	.0009	.0107
1542	.999	-.01	7.94	.1839	.0083	-.0031	-.0001	-.0002	-.0007	.0005	.0003	.0007	.0009	.0106
1543	1.000	-.01	9.91	.2271	.0084	-.0025	-.0001	-.0001	-.0007	.0005	.0003	.0007	.0009	.0108
1544	1.000	-.01	11.91	.2725	.0088	-.0011	-.0002	-.0001	-.0009	.0006	.0003	.0007	.0009	.0112
1545	1.000	-.01	13.96	.3190	.0092	.0008	-.0001	-.0001	-.0010	.0006	.0003	.0007	.0009	.0117

UPWT PROJECT 1239					BATCH 20			RUN 99		MACH 2.96				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1532	-5.1264	-.01	-4.07	-.0752	.0147	.0099	-.0001	-.0003	-.0001	.0005	.0003	.0008	.0009	.0171
1533	-3.1649	-.01	-2.08	-.0334	.0106	.0078	-.0001	-.0002	-.0002	.0005	.0003	.0007	.0009	.0129
1534	-1.1111	-.01	-1.00	-.0106	.0095	.0062	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0119
1535	1.0569	-.01	-.05	.0098	.0093	.0047	-.0001	-.0002	-.0003	.0005	.0003	.0007	.0009	.0116
1536	3.2063	-.01	.95	.0313	.0098	.0030	-.0001	-.0002	-.0004	.0005	.0003	.0007	.0009	.0121
1537	4.7781	-.01	1.92	.0522	.0109	.0014	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0133
1538	5.6946	-.01	2.92	.0727	.0128	.0001	-.0000	-.0002	-.0005	.0005	.0003	.0007	.0009	.0152
1539	6.1727	-.01	3.95	.0951	.0154	-.0011	-.0001	-.0002	-.0005	.0005	.0003	.0007	.0009	.0178
1540	6.2409	-.01	4.93	.1164	.0186	-.0020	-.0001	-.0002	-.0006	.0005	.0003	.0007	.0009	.0210
1541	6.0621	-.01	5.94	.1376	.0227	-.0025	-.0001	-.0002	-.0007	.0005	.0003	.0007	.0009	.0251
1542	5.3736	-.01	7.94	.1806	.0336	-.0031	-.0001	-.0002	-.0007	.0005	.0003	.0007	.0009	.0359
1543	4.6855	-.01	9.91	.2218	.0473	-.0025	-.0001	-.0001	-.0007	.0005	.0003	.0007	.0009	.0497
1544	4.0764	-.01	11.91	.2642	.0648	-.0011	-.0002	-.0000	-.0009	.0006	.0003	.0007	.0008	.0672
1545	3.5681	-.01	13.96	.3066	.0859	.0008	-.0001	-.0001	-.0010	.0006	.0003	.0007	.0008	.0884

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 20				RUN 100				MACH 2.96			
BODY AXIS		AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
1547	1.000	3.15	-4.02	-.0761	.0093	.0095	.0010	-.0027	-.0108	.0005	.0003	.0008	.0009	.0118	
1548	1.000	3.12	-2.00	-.0339	.0095	.0075	.0007	-.0019	-.0114	.0005	.0003	.0007	.0009	.0119	
1549	1.000	3.12	-1.01	-.0125	.0095	.0062	.0005	-.0016	-.0117	.0005	.0003	.0007	.0009	.0119	
1550	1.000	3.11	-.04	.0084	.0095	.0047	.0004	-.0014	-.0120	.0005	.0003	.0007	.0009	.0118	
1551	1.000	3.11	.96	.0300	.0094	.0033	.0002	-.0013	-.0126	.0005	.0003	.0007	.0009	.0118	
1552	1.000	3.12	1.94	.0508	.0093	.0018	.0001	-.0012	-.0131	.0005	.0003	.0007	.0009	.0116	
1553	1.000	3.12	2.92	.0717	.0091	.0005	-.0002	-.0011	-.0138	.0005	.0003	.0007	.0009	.0115	
1554	1.000	3.12	3.90	.0933	.0088	-.0005	-.0005	-.0011	-.0143	.0005	.0003	.0007	.0009	.0112	
1555	1.000	3.12	4.93	.1158	.0087	-.0013	-.0009	-.0011	-.0142	.0005	.0003	.0007	.0009	.0111	
1556	1.001	3.12	5.92	.1384	.0087	-.0019	-.0014	-.0011	-.0137	.0005	.0003	.0007	.0009	.0111	
1557	1.000	3.11	7.96	.1824	.0086	-.0021	-.0022	-.0012	-.0130	.0005	.0003	.0007	.0009	.0110	
1558	1.000	3.11	9.94	.2266	.0086	-.0014	-.0030	-.0014	-.0117	.0006	.0003	.0007	.0009	.0110	
1559	1.001	3.11	11.92	.2721	.0088	-.0004	-.0036	-.0017	-.0108	.0006	.0003	.0007	.0009	.0112	
1560	1.000	3.11	13.98	.3198	.0092	.0012	-.0044	-.0019	-.0096	.0007	.0003	.0007	.0009	.0117	

UPWT PROJECT 1239				BATCH 20			RUN 100			MACH 2.96				
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1547	-5.1130	3.15	-4.02	-.0750	.0147	.0095	.0012	-.0026	-.0108	.0005	.0003	.0008	.0009	.0171
1548	-3.1428	3.12	-2.00	-.0335	.0106	.0075	.0007	-.0018	-.0114	.0005	.0003	.0007	.0009	.0131
1549	-1.2676	3.12	-1.01	-.0123	.0097	.0062	.0005	-.0016	-.0117	.0005	.0003	.0007	.0009	.0121
1550	.8920	3.11	-.04	.0084	.0095	.0047	.0004	-.0014	-.0120	.0005	.0003	.0007	.0009	.0118
1551	3.0058	3.11	.96	.0298	.0099	.0033	.0002	-.0013	-.0126	.0005	.0003	.0007	.0009	.0123
1552	4.5893	3.12	1.94	.0503	.0110	.0018	.0000	-.0012	-.0131	.0005	.0003	.0007	.0009	.0134
1553	5.5931	3.12	2.92	.0710	.0127	.0005	-.0003	-.0011	-.0138	.0005	.0003	.0007	.0009	.0151
1554	6.0912	3.12	3.90	.0923	.0152	-.0005	-.0006	-.0011	-.0143	.0005	.0003	.0007	.0009	.0175
1555	6.1432	3.12	4.93	.1144	.0186	-.0013	-.0010	-.0011	-.0142	.0005	.0003	.0007	.0009	.0210
1556	5.9436	3.12	5.92	.1365	.0230	-.0019	-.0016	-.0010	-.0137	.0005	.0003	.0007	.0009	.0253
1557	5.2990	3.11	7.96	.1791	.0338	-.0021	-.0023	-.0008	-.0130	.0005	.0003	.0007	.0009	.0362
1558	4.6527	3.11	9.94	.2212	.0476	-.0014	-.0032	-.0008	-.0117	.0006	.0003	.0007	.0009	.0499
1559	4.0728	3.11	11.92	.2638	.0648	-.0004	-.0039	-.0009	-.0108	.0006	.0003	.0007	.0008	.0672
1560	3.5672	3.11	13.98	.3073	.0862	.0012	-.0048	-.0008	-.0096	.0006	.0003	.0007	.0008	.0886

TABLE AIII.- Continued

UPWT PROJECT 1239				BATCH 21				RUN 101				MACH 2.30		
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
1568	.998	.01	-4.14	-.1004	.0122	.0178	.0001	-.0001	-.0004	.0007	.0004	.0013	.0010	.0156
1569	.997	.01	-2.16	-.0491	.0120	.0134	-.0001	-.0000	-.0005	.0007	.0004	.0012	.0010	.0153
1570	.997	.00	-1.07	-.0203	.0117	.0105	-.0001	.0001	-.0006	.0007	.0004	.0012	.0010	.0150
1571	.997	.01	-.20	.0027	.0115	.0081	-.0002	.0001	-.0008	.0007	.0004	.0012	.0010	.0148
1572	.996	.00	.86	.0296	.0111	.0051	-.0003	.0001	-.0008	.0007	.0004	.0012	.0010	.0144
1573	.997	.01	.87	.0308	.0111	.0051	-.0002	.0001	-.0008	.0007	.0004	.0012	.0010	.0144
1574	.997	.00	1.88	.0571	.0106	.0024	-.0004	.0001	-.0010	.0007	.0004	.0012	.0010	.0139
1575	.996	.00	2.83	.0810	.0100	-.0000	-.0003	.0002	-.0011	.0008	.0004	.0012	.0010	.0133
1576	.997	.00	3.77	.1056	.0093	-.0023	-.0004	.0002	-.0012	.0008	.0004	.0012	.0010	.0126
1577	.997	.00	4.80	.1345	.0086	-.0044	-.0004	.0002	-.0013	.0008	.0004	.0012	.0010	.0119
1578	.996	.01	5.83	.1625	.0083	-.0056	-.0005	.0002	-.0016	.0008	.0004	.0012	.0010	.0116
1579	.997	.01	7.82	.2149	.0087	-.0065	-.0004	.0003	-.0017	.0008	.0004	.0011	.0010	.0119
1580	.996	.01	9.82	.2663	.0086	-.0065	-.0004	.0002	-.0020	.0008	.0004	.0011	.0010	.0119
1581	.996	.01	11.78	.3175	.0087	-.0061	-.0006	.0004	-.0022	.0008	.0005	.0011	.0010	.0120
1582	.996	.01	13.82	.3716	.0090	-.0044	-.0006	.0005	-.0024	.0009	.0005	.0011	.0010	.0124

UPWT PROJECT 1239				BATCH 21				RUN 101				MACH 2.30		
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1568	-5.0903	.01	-4.14	-.0989	.0194	.0178	.0001	-.0001	-.0004	.0007	.0004	.0013	.0010	.0228
1569	-3.5071	.01	-2.16	-.0484	.0138	.0134	-.0001	-.0000	-.0005	.0007	.0004	.0012	.0010	.0172
1570	-1.6487	.00	-1.07	-.0199	.0121	.0105	-.0001	.0001	-.0006	.0007	.0004	.0012	.0010	.0154
1571	.2394	.01	-.20	.0027	.0115	.0081	-.0002	.0001	-.0008	.0007	.0004	.0012	.0010	.0148
1572	2.5532	.00	.86	.0294	.0115	.0051	-.0003	.0001	-.0008	.0007	.0004	.0012	.0010	.0148
1573	2.6550	.01	.87	.0306	.0115	.0051	-.0002	.0001	-.0008	.0007	.0004	.0012	.0010	.0149
1574	4.5476	.00	1.88	.0566	.0124	.0024	-.0004	.0002	-.0010	.0007	.0004	.0012	.0010	.0158
1575	5.7519	.00	2.83	.0802	.0139	-.0000	-.0003	.0002	-.0011	.0008	.0004	.0012	.0010	.0173
1576	6.4357	.00	3.77	.1045	.0162	-.0023	-.0004	.0002	-.0012	.0008	.0004	.0012	.0010	.0196
1577	6.7035	.00	4.80	.1330	.0198	-.0044	-.0004	.0003	-.0013	.0007	.0004	.0012	.0010	.0231
1578	6.4733	.01	5.83	.1605	.0248	-.0056	-.0005	.0003	-.0016	.0007	.0004	.0012	.0010	.0281
1579	5.5848	.01	7.82	.2112	.0378	-.0065	-.0004	.0003	-.0017	.0008	.0004	.0011	.0010	.0411
1580	4.8323	.01	9.82	.2603	.0539	-.0065	-.0004	.0003	-.0020	.0008	.0004	.0011	.0010	.0571
1581	4.2056	.01	11.78	.3082	.0733	-.0061	-.0005	.0005	-.0022	.0008	.0004	.0011	.0009	.0766
1582	3.6713	.01	13.82	.3578	.0975	-.0044	-.0004	.0006	-.0024	.0009	.0005	.0010	.0009	.1008

TABLE AIII.- Continued

UPWT PROJECT 1239					BATCH 21			RUN 102			MACH 2.96			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW														
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC
1584	1.000	.01	-4.05	-.0801	.0111	.0130	.0000	-.0002	-.0001	.0005	.0003	.0008	.0009	.0136
1585	.999	.00	-2.02	-.0354	.0108	.0098	-.0000	-.0001	-.0003	.0005	.0003	.0007	.0009	.0133
1586	.999	.00	-1.08	-.0142	.0107	.0080	-.0001	-.0000	-.0003	.0005	.0003	.0007	.0009	.0131
1587	.999	.00	-.06	.0091	.0104	.0057	-.0001	.0000	-.0005	.0005	.0003	.0007	.0009	.0128
1588	1.000	.00	.92	.0314	.0102	.0036	-.0001	-.0000	-.0003	.0005	.0003	.0007	.0009	.0126
1589	.999	.01	1.94	.0541	.0099	.0016	-.0001	-.0001	-.0002	.0006	.0003	.0007	.0009	.0124
1590	1.000	.01	2.93	.0757	.0097	-.0001	-.0001	-.0001	-.0004	.0006	.0003	.0007	.0009	.0121
1591	1.000	.01	3.95	.0983	.0094	-.0015	-.0001	-.0001	-.0006	.0006	.0003	.0007	.0009	.0118
1592	1.000	.01	4.94	.1200	.0090	-.0025	-.0001	-.0001	-.0006	.0006	.0003	.0007	.0009	.0115
1593	.999	.01	5.98	.1433	.0088	-.0033	-.0002	-.0001	-.0006	.0006	.0003	.0007	.0009	.0112
1594	1.000	.01	7.98	.1880	.0087	-.0040	-.0002	-.0000	-.0009	.0006	.0003	.0007	.0009	.0111
1595	1.000	.01	9.93	.2308	.0087	-.0036	-.0002	.0000	-.0011	.0006	.0003	.0007	.0009	.0111
1596	1.000	.01	11.95	.2765	.0090	-.0024	-.0002	.0001	-.0013	.0006	.0003	.0007	.0009	.0115
1597	1.000	.01	13.96	.3223	.0093	-.0005	-.0002	.0002	-.0014	.0007	.0003	.0007	.0009	.0119

UPWT PROJECT 1239					BATCH 21			RUN 102			MACH 2.96			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW												
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC
1584	-4.7010	.01	-4.05	-.0788	.0168	.0130	.0000	-.0001	-.0001	.0005	.0003	.0008	.0009	.0192
1585	-2.8806	.00	-2.02	-.0348	.0121	.0098	-.0000	-.0001	-.0003	.0005	.0003	.0007	.0009	.0145
1586	-1.2762	.00	-1.08	-.0139	.0109	.0080	-.0001	-.0000	-.0003	.0005	.0003	.0007	.0009	.0133
1587	.8756	.00	-.06	.0091	.0104	.0057	-.0001	.0000	-.0005	.0005	.0003	.0007	.0009	.0128
1588	2.9175	.00	.92	.0312	.0107	.0036	-.0001	-.0000	-.0003	.0005	.0003	.0007	.0009	.0131
1589	4.5608	.01	1.94	.0537	.0118	.0016	-.0001	-.0001	-.0002	.0006	.0003	.0007	.0009	.0142
1590	5.5351	.01	2.93	.0749	.0135	-.0001	-.0001	-.0001	-.0004	.0006	.0003	.0007	.0009	.0160
1591	6.0356	.01	3.95	.0972	.0161	-.0015	-.0001	-.0001	-.0006	.0006	.0003	.0007	.0009	.0185
1592	6.1386	.01	4.94	.1185	.0193	-.0025	-.0001	-.0001	-.0006	.0006	.0003	.0007	.0009	.0217
1593	5.9743	.01	5.98	.1413	.0237	-.0033	-.0002	-.0001	-.0006	.0006	.0003	.0007	.0009	.0261
1594	5.3191	.01	7.98	.1845	.0347	-.0040	-.0002	.0000	-.0009	.0005	.0003	.0007	.0009	.0371
1595	4.6547	.01	9.93	.2253	.0484	-.0036	-.0001	.0001	-.0011	.0006	.0003	.0007	.0009	.0508
1596	4.0588	.01	11.95	.2680	.0660	-.0024	-.0002	.0001	-.0013	.0006	.0003	.0007	.0008	.0685
1597	3.5709	.01	13.96	.3098	.0868	-.0005	-.0001	.0002	-.0014	.0007	.0003	.0007	.0008	.0893

TABLE AIII.- Concluded

UPWT PROJECT 1239				BATCH 21				RUN 103				MACH 3.30			
BODY AXIS AXIAL FORCE CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW															
PT	R/RT	BETA	ALPHA	CN	CA	CM	CLB	CNB	CY	CAC	CAB	CABN	CAI	CA UNC	
1599	.999	.01	-4.13	-.0742	.0103	.0111	.0001	-.0003	.0001	.0004	.0003	.0007	.0008	.0125	
1600	.999	.01	-2.07	-.0336	.0101	.0083	.0001	-.0003	.0002	.0004	.0003	.0006	.0008	.0122	
1601	.998	.01	-1.10	-.0138	.0099	.0068	.0001	-.0002	.0001	.0004	.0003	.0006	.0008	.0120	
1602	.999	.01	-.08	.0067	.0097	.0050	.0001	-.0002	-.0001	.0004	.0003	.0006	.0008	.0118	
1603	.999	.01	.91	.0267	.0096	.0033	.0001	-.0002	-.0001	.0004	.0003	.0006	.0008	.0117	
1604	.998	.01	1.87	.0463	.0094	.0018	.0000	-.0002	-.0001	.0005	.0003	.0006	.0008	.0115	
1605	1.000	.01	2.88	.0665	.0092	.0004	.0000	-.0002	-.0001	.0005	.0003	.0006	.0008	.0113	
1606	1.000	.01	3.90	.0870	.0090	-.0009	-.0000	-.0002	-.0004	.0005	.0003	.0006	.0008	.0111	
1607	1.000	.01	4.89	.1068	.0088	-.0018	-.0001	-.0002	-.0003	.0005	.0003	.0006	.0008	.0109	
1608	1.000	.01	5.91	.1274	.0086	-.0025	-.0001	-.0002	-.0003	.0005	.0003	.0005	.0008	.0107	
1609	1.000	.01	7.90	.1690	.0085	-.0033	-.0001	-.0001	-.0005	.0004	.0002	.0005	.0008	.0105	
1610	1.000	.01	9.89	.2106	.0086	-.0032	-.0001	-.0000	-.0006	.0005	.0003	.0005	.0008	.0107	
1611	1.000	.01	11.91	.2523	.0089	-.0021	-.0002	.0000	-.0007	.0005	.0003	.0005	.0008	.0111	
1612	1.000	.01	13.89	.2960	.0094	-.0009	-.0002	.0001	-.0010	.0005	.0003	.0006	.0008	.0116	

UPWT PROJECT 1239				BATCH 21				RUN 103				MACH 3.30			
STABILITY AXIS		DRAG CORRECTED FOR BASE, CHAMBER, NACELLE BASE, AND INTERNAL FLOW													
PT	L/D	BETA	ALPHA	CL	CD	CM	CLS	CNS	CY	CDC	CDB	CDBN	CDI	CD UNC	
1599	-4.6814	.01	-4.13	-.0731	.0156	.0111	.0001	-.0003	.0001	.0004	.0003	.0006	.0008	.0178	
1600	-2.9344	.01	-2.07	-.0330	.0113	.0083	.0001	-.0003	.0002	.0004	.0003	.0006	.0008	.0134	
1601	-1.3277	.01	-1.10	-.0135	.0102	.0068	.0001	-.0002	.0001	.0004	.0003	.0006	.0008	.0123	
1602	.6877	.01	-.08	.0067	.0097	.0050	.0001	-.0002	-.0001	.0004	.0003	.0006	.0008	.0118	
1603	2.6533	.01	.91	.0265	.0100	.0033	.0000	-.0002	-.0001	.0004	.0003	.0006	.0008	.0121	
1604	4.2155	.01	1.87	.0459	.0109	.0018	.0000	-.0002	-.0001	.0005	.0003	.0006	.0008	.0130	
1605	5.2520	.01	2.88	.0658	.0125	.0004	.0000	-.0002	-.0001	.0005	.0003	.0006	.0008	.0146	
1606	5.7866	.01	3.90	.0860	.0149	-.0009	-.0001	-.0001	-.0004	.0005	.0003	.0006	.0008	.0170	
1607	5.9151	.01	4.89	.1054	.0178	-.0018	-.0001	-.0001	-.0003	.0005	.0003	.0006	.0008	.0199	
1608	5.8001	.01	5.91	.1256	.0217	-.0025	-.0001	-.0001	-.0003	.0005	.0002	.0005	.0008	.0237	
1609	5.2360	.01	7.90	.1659	.0317	-.0033	-.0001	-.0001	-.0005	.0004	.0002	.0005	.0008	.0337	
1610	4.6006	.01	9.89	.2055	.0447	-.0032	-.0001	-.0000	-.0006	.0005	.0003	.0005	.0008	.0467	
1611	4.0212	.01	11.91	.2445	.0608	-.0021	-.0002	.0001	-.0007	.0005	.0003	.0005	.0008	.0629	
1612	3.5485	.01	13.89	.2845	.0802	-.0009	-.0002	.0001	-.0010	.0005	.0003	.0005	.0008	.0823	

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TABLE I.- GEOMETRIC CHARACTERISTICS OF MODEL

Wing:

Area (reference), cm ² (ft ²)	2212.950 (2.382)
Aspect ratio	1.472
Volume (outboard of wing-fuselage break), cm ³ (in ³)	1553.068 (94.774)
Span, cm (in.)	57.094 (22.478)
Wetted area (outboard of wing-fuselage break), cm ² (in ²)	3142.350 (487.066)
Λ_{le} (inboard)	Circular arc
Λ_{le} (midwing), deg	75.00
Λ_{le} (tip), deg	60.00
$\bar{c}$, cm (in.)	54.333 (21.391)
Airfoil section ($2y/b < 0.7315$)	65A-00x
Airfoil section ($2y/b > 0.7315$)	Biconvex

Vertical tail (each):

Area (V_1 and V_2), cm ² (in ²)	128.026 (19.844)
Aspect ratio	0.75
Wetted area, cm ² (in ²)	256.875 (39.815)
Λ_{le} , deg	53.95
Λ_{te} , deg	0.00
Mean geometric chord, cm (in.)	14.224 (5.600)
Airfoil section ($(t/c)_{max} = 2.4$ percent)	Biconvex

Ventral fin:

Area, cm ² (in ²)	128.026 (19.844)
Aspect ratio	0.338
Wetted area, cm ² (in ²)	124.567 (19.308)
Λ_{le} , deg	65.00
Λ_{te} , deg	55.65
Airfoil section ($(t/c)_{max} = 3$ percent)	Double wedge

Nacelle:

Inlet capture area (each), cm ² (in ²)	13.794 (2.138)
Exit area (each), cm ² (in ²)	13.794 (2.138)
Nacelle base area (each), cm ² (in ²)	8.548 (1.325)
Nacelle wetted area (each), cm ² (in ²)	383.225 (59.400)

Fuselage:

Volume (inboard of wing-fuselage break), cm ³ (in ³)	3518.454 (214.709)
Fuselage length, cm (in.)	128.194 (50.470)
Fuselage base area, cm ² (in ²)	7.742 (1.200)
Fuselage wetted area, cm ² (in ²)	2611.5 (404.784)
Sting cavity area, cm ² (in ²)	6.587 (1.021)

TABLE II.- NUMERICAL MODEL

(a) SI Units. All linear dimensions in centimeters

SUPERSONIC CRUISE VEHICLE (MEASURED COORDINATES)											1 4 1 10		
1	1	1	1	13	26	3	22	15	23	11	16	3	
2212.90													
0.0	.50	.75	1.25	2.50	5.0	7.5	10.	15.	20.				XAF 10
25.	30.	35.	40.	45.	50.	55.	60.	65.	70.				XAF 20
75.	80.	85.	90.	95.	100.								XAF 24
56.238	4.280-19.050	75.057											WNRG 2
63.259	5.718-19.050	68.036											WNRG 3
69.637	7.136-19.050	61.659											WNRG 4
75.603	8.566-19.050	55.687											WNRG 5
86.076	11.289-19.050	45.248											WNRG 6
91.882	12.846-19.050	40.119											WNRG 7
102.497	15.704-19.050	30.805											WNRG 8
113.187	18.557-19.050	21.420											WNRG 9
121.755	20.884-19.050	13.904											WNRG 10
122.778	21.391-19.050	13.167											WNRG 11
125.270	22.840-19.050	11.293											WNRG 12
130.122	25.657-19.050	7.737											WNRG 13
135.113	28.547-19.050	4.031											WNRG 14
19.878	19.962	19.973	19.985	20.037	20.126	20.187	20.204	20.165	20.089				7 2
19.969	19.815	19.649	19.500	19.350	19.232	19.127	19.039	18.978	18.945				7 2
18.928	18.928	18.933	18.934	18.937	18.937								7 2
19.789	19.823	19.834	19.851	19.898	19.989	20.048	20.072	20.057	20.001				7 3
19.901	19.782	19.652	19.538	19.422	19.327	19.242	19.173	19.127	19.106				7 3
19.114	19.125	19.154	19.188	19.210	19.224								7 3
19.672	19.667	19.675	19.691	19.742	19.835	19.902	19.948	19.958	19.915				7 4
19.840	19.754	19.655	19.572	19.497	19.406	19.333	19.274	19.229	19.206				7 4
19.205	19.216	19.242	19.266	19.285	19.298								7 4
19.482	19.508	19.520	19.539	19.590	19.690	19.766	19.813	19.845	19.835				7 5
19.790	19.733	19.667	19.604	19.540	19.472	19.413	19.373	19.341	19.323				7 5
19.308	19.294	19.281	19.267	19.253	19.246								7 5
19.214	19.242	19.249	19.271	19.323	19.417	19.498	19.558	19.637	19.675				7 6
19.688	19.680	19.661	19.638	19.610	19.581	19.555	19.531	19.520	19.520				7 6
19.525	19.528	19.524	19.517	19.502	19.488								7 6
19.091	19.111	19.121	19.141	19.188	19.282	19.362	19.428	19.528	19.583				7 7
19.672	19.637	19.637	19.634	19.625	19.613	19.601	19.594	19.590	19.595				7 7
19.604	19.616	19.632	19.634	19.633	19.624								7 7
18.895	18.933	18.943	18.961	19.003	19.084	19.164	19.230	19.334	19.416				7 8
19.475	19.521	19.554	19.582	19.604	19.623	19.642	19.661	19.680	19.705				7 8
19.723	19.737	19.756	19.768	19.783	19.794								7 8
18.854	18.877	18.884	18.894	18.923	18.979	19.035	19.088	19.177	19.254				7 9
19.322	19.388	19.449	19.495	19.544	19.590	19.630	19.667	19.704	19.731				7 9
19.759	19.784	19.802	19.832	19.860	19.878								7 9
18.895	18.918	18.924	18.933	18.955	18.989	19.023	19.055	19.116	19.171				7 10
19.227	19.280	19.332	19.383	19.437	19.479	19.514	19.547	19.585	19.622				7 10
19.656	19.688	19.718	19.745	19.769	19.793								7 10
18.938	18.952	18.957	18.964	18.979	19.007	19.033	19.056	19.103	19.149				7 11
19.194	19.238	19.286	19.333	19.378	19.420	19.458	19.496	19.535	19.573				7 11
19.609	19.644	19.676	19.707	19.733	19.759								7 11
19.058	19.063	19.065	19.068	19.075	19.088	19.102	19.116	19.145	19.172				7 12
19.201	19.230	19.261	19.294	19.324	19.354	19.387	19.420	19.453	19.483				7 12
19.516	19.545	19.573	19.599	19.623	19.644								7 12
19.186	19.190	19.192	19.197	19.205	19.211	19.216	19.221	19.233	19.243				7 13
19.256	19.267	19.280	19.294	19.307	19.319	19.332	19.345	19.357	19.368				7 13
19.378	19.389	19.397	19.404	19.413	19.422								7 13
19.181	19.182	19.182	19.185	19.187	19.188	19.190	19.191	19.192	19.194				7 14
19.196	19.200	19.200	19.201	19.201	19.201	19.201	19.200	19.200	19.200				7 14
19.200	19.199	19.199	19.197	19.199	19.210								7 14
0.0	.2415	.2930	.3675	.5205	.7085	.8510	.9765	1.1750	1.3190				7 2
1.4285	1.5075	1.5570	1.5830	1.5915	1.6030	1.5920	1.5455	1.4665	1.3430				7 2
1.1945	1.0180	.9120	.5730	.3010	0.0								7 2
0.0	.2355	.2885	.3735	.5145	.7025	.8490	.9715	1.1655	1.3050				7 3
1.4160	1.4950	1.5455	1.5710	1.5835	1.5935	1.5820	1.5355	1.4565	1.3170				7 3
1.1805	1.0115	.8045	.5670	.2970	0.0								7 3
0.0	.2310	.2865	.3625	.5000	.6935	.8395	.9470	1.1380	1.2835				7 4
1.3920	1.4700	1.5190	1.5460	1.5575	1.5595	1.5510	1.5110	1.4170	1.2975				7 4
1.1655	.9930	.7915	.5585	.2930	0.0								7 4
0.0	.2255	.2790	.3555	.4875	.6655	.8045	.9215	1.1160	1.2520				7 5
1.3575	1.4350	1.4850	1.5105	1.5205	1.5210	1.5070	1.4575	1.3780	1.2740				7 5
1.1390	.9730	.7765	.5455	.2875	0.000								7 5
0.0	.2245	.2710	.3420	.4665	.6560	.7960	.9005	1.0720	1.1925				7 6
1.2895	1.3625	1.4115	1.4365	1.4490	1.4500	1.4290	1.3870	1.3150	1.2160				7 6
1.0855	.9265	.7390	.5205	.2750	0.0								7 6
0.0	.2140	.2600	.3315	.4595	.6285	.7640	.8715	1.0420	1.1630				7 7
1.2535	1.3240	1.3745	1.4030	1.4145	1.4155	1.3945	1.3495	1.2805	1.1860				7 7
1.0605	.9020	.6995	.5020	.2645	0.0								7 7
0.0	.1685	.2275	.3090	.4430	.6170	.7350	.8480	1.0240	1.1515				7 8
1.2515	1.3200	1.3580	1.3815	1.3925	1.3865	1.3670	1.3260	1.2545	1.1565				7 8
1.0335	.8665	.6830	.4920	.2625	0.0								7 8
0.0	.2165	.2600	.3305	.4650	.6240	.7490	.8510	1.0285	1.1630				7 9
1.2695	1.3290	1.3490	1.3935	1.3935	1.3855	1.3565	1.3040	1.2380	1.1365				7 9
1.0130	.8435	.6390	.4735	.2600	0.0								7 9
0.0	.1675	.2135	.2715	.3845	.5190	.6310	.7440	.9315	1.0895				7 10
1.2795	1.3440	1.4335	1.4865	1.5505	1.5490	1.4875	1.4090	1.3500	1.2470				7 10
1.1265	.9855	.8125	.6035	.3605	0.0								7 10
0.0	.1550	.1895	.2335	.3270	.4545	.5560	.6440	.8165	.9665				7 11
1.1035	1.2225	1.3145	1.3735	1.4070	1.4210	1.4095	1.3695	1.3050	1.2170				7 11
1.1095	.9800	.8320	.6480	.4330	0.0								7 11
0.0	.1345	.1595	.1945	.2740	.3975	.4995	.6030	.8130	.9585				7 12
1.0890	1.1950	1.2760	1.3435	1.3750	1.3795	1.3685	1.3295	1.2705	1.1930				7 12
1.0910	.9620	.8190	.6440	.4485	0.0								7 12
0.0	.0855	.1310	.2180	.3330	.4395	.5265	.6065	.7610	.8820				7 13

TABLE II.- Continued

(a) Continued

.9985	1.0930	1.1695	1.2235	1.2525	1.2645	1.2505	1.2165	1.1800	1.1145	T	13
1.0290	.9220	.7975	.6510	.4825	0.0					T	13
0.0	.1205	.1805	.2970	.4245	.5215	.6285	.7255	.8840	1.0230	T	14
1.1085	1.1420	1.1940	1.2335	1.2515	1.2630	1.2660	1.2455	1.2150	1.1700	T	14
1.1185	1.0640	.9855	.8895	.7270	0.0					T	14
14.681	15.573	17.399	18.164	19.764	21.336	24.943	28.578	33.909	41.481	XFHS	10
47.628	49.744	52.032	54.595	57.153						XFHS	15
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Y	1
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Y	1
0.000	0.000									Y	1
2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	Z	1
2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	Z	1
2.416	2.416									Z	1
0.000	.043	.094	.094	.119	.119	.145	.145	.145	.145	Y	2
.145	.145	.145	.145	.147	.147	.147	.122	.122	.097	Y	2
.020	0.000									Y	2
2.314	2.314	2.314	2.314	2.339	2.339	2.339	2.339	2.339	2.339	Z	2
2.339	2.339	2.339	2.365	2.390	2.390	2.416	2.441	2.466	2.543	Z	2
2.568	2.568									Z	2
0.000	.069	.145	.196	.272	.348	.399	.450	.500	.500	Y	3
.500	.500	.500	.500	.475	.452	.427	.376	.325	.251	Y	3
.099	0.000									Y	3
2.187	2.212	2.212	2.210	2.210	2.210	2.210	2.210	2.261	2.261	Z	3
2.261	2.261	2.261	2.337	2.388	2.464	2.540	2.616	2.718	2.797	Z	3
2.873	2.901									Z	3
0.000	.043	.170	.272	.348	.475	.551	.653	.655	.655	Y	4
.655	.655	.655	.630	.605	.579	.554	.531	.480	.381	Y	4
.178	0.000									Y	4
2.136	2.136	2.162	2.134	2.134	2.159	2.182	2.182	2.233	2.233	Z	4
2.233	2.233	2.207	2.258	2.309	2.385	2.487	2.565	2.667	2.845	Z	4
3.000	3.053									Z	4
0.000	.191	.343	.445	.597	.749	.879	.955	1.057	1.057	Y	5
1.057	1.057	.980	.930	.853	.805	.754	.729	.704	.554	Y	5
.300	0.000									Y	5
2.009	2.009	2.007	2.032	2.032	2.029	2.055	2.080	2.103	2.154	Z	5
2.154	2.230	2.258	2.360	2.410	2.512	2.639	2.718	2.870	3.073	Z	5
3.254	3.307									Z	5
0.000	.249	.452	.655	.808	.960	1.113	1.242	1.344	1.394	Y	6
1.369	1.344	1.267	1.194	1.092	1.067	1.044	.993	.945	.719	Y	6
.442	0.000									Y	6
1.908	1.905	1.902	1.900	1.925	1.923	1.946	1.971	2.022	2.070	Z	6
2.047	2.149	2.200	2.250	2.355	2.456	2.558	2.685	2.865	3.223	Z	6
3.454	3.586									Z	6
0.000	.391	.620	.851	1.130	1.384	1.562	1.765	1.946	2.022	Y	7
2.022	1.946	1.819	1.717	1.539	1.516	1.440	1.316	1.118	.864	Y	7
.511	0.000									Y	7
1.654	1.651	1.648	1.648	1.671	1.694	1.720	1.793	1.819	1.869	Z	7
1.869	1.946	2.047	2.101	2.151	2.304	2.535	2.992	3.528	3.861	Z	7
4.117	4.196									Z	7
0.000	.391	.673	.953	1.309	1.613	1.920	2.149	2.352	2.504	Y	8
2.504	2.405	2.278	2.075	1.897	1.849	1.725	1.527	1.278	.950	Y	8
.569	0.000									Y	8
1.450	1.448	1.471	1.468	1.516	1.539	1.613	1.661	1.712	1.760	Z	8
1.760	1.839	1.915	1.943	2.045	2.250	2.657	3.320	4.084	4.493	Z	8
4.752	4.831									Z	8
0.000	.490	.871	1.255	1.661	2.017	2.299	2.604	2.858	3.035	Y	9
3.010	2.860	2.657	2.428	2.250	2.174	1.951	1.577	1.252	1.001	Y	9
.546	0.000									Y	9
1.118	1.115	1.138	1.161	1.234	1.283	1.359	1.407	1.455	1.506	Z	9
1.532	1.582	1.687	1.737	1.791	1.994	2.835	3.932	4.823	5.156	Z	9
5.464	5.545									Z	9
0.000	.513	.998	1.481	1.966	2.499	2.804	3.112	3.264	3.391	Y	10
3.416	3.289	3.112	2.883	2.654	2.555	2.159	1.636	1.361	1.059	Y	10
.554	0.000									Y	10
.762	.785	.808	.879	.927	1.052	1.125	1.173	1.224	1.273	Z	10
1.323	1.351	1.377	1.405	1.455	1.687	3.063	4.719	5.585	6.045	Z	10
6.355	6.510									Z	10
0.000	.533	.965	1.501	2.111	2.670	3.025	3.282	3.485	3.663	Y	11
3.663	3.485	3.307	3.129	2.898	2.771	2.212	1.781	1.349	1.016	Y	11
.559	0.000									Y	11
.432	.432	.457	.508	.584	.711	.787	.838	.864	.965	Z	11
.965	1.044	1.146	1.196	1.400	1.730	3.485	5.036	6.281	6.764	Z	11
7.043	7.170									Z	11
0.000	.432	.813	1.323	1.984	2.593	2.873	3.155	3.459	3.663	Y	12
3.663	3.510	3.307	3.076	2.873	2.746	2.136	1.704	1.323	1.095	Y	12
.584	0.000									Y	12
.356	.330	.330	.406	.483	.610	.660	.737	.787	.838	Z	12
.838	1.044	1.196	1.400	1.628	1.933	3.866	5.362	6.459	6.891	Z	12
7.221	7.351									Z	12
0.000	.635	1.120	1.552	1.984	2.520	2.926	3.256	3.612	3.764	Y	13
3.764	3.637	3.360	3.081	2.903	2.700	2.118	1.689	1.308	1.029	Y	13
.572	0.000									Y	13
.229	.229	.277	.328	.378	.505	.605	.655	.732	.808	Z	13
.808	1.087	1.316	1.572	1.826	2.106	4.067	5.491	6.609	7.069	Z	13
7.348	7.478									Z	13
0.000	.686	1.196	1.679	2.136	2.644	3.076	3.510	3.942	4.018	Y	14
4.018	3.866	3.586	3.155	2.847	2.644	2.111	1.679	1.323	1.044	Y	14
.584	0.000									Y	14
.025	.051	.127	.203	.305	.432	.559	.610	.686	.838	Z	14
.813	1.196	1.476	1.755	2.009	2.314	4.171	5.570	6.637	7.018	Z	14
7.376	7.478									Z	14
0.000	.610	1.146	1.654	2.162	2.695	3.129	3.637	4.018	4.298	Y	15

TABLE II.- Continued

(a) Concluded

4.298	3.967	3.739	3.332	2.873	2.644	2.212	1.781	1.323	1.069	Y	15
.660	0.000									Y	15
-.076	-.051	-.025	.076	.203	.381	.483	.584	.584	.660	Z	15
1.222	1.476	1.704	1.908	2.085	2.517	3.840	5.136	6.662	6.993	Z	15
7.325	7.452									Z	15
57.153	60.201	63.249	65.662	70.589	97.259	112.499	118.214	123.927	130.178	XFHS	10
131.295										XFHS	11
0.000	.610	1.171	1.628	2.113	2.697	3.129	3.640	4.021	4.300	Y	1
4.300	4.097	3.868	3.589	3.129	2.799	2.621	2.189	1.781	1.323	Y	1
1.095	.663	0.000								Y	1
-.076	-.051	-.025	.076	.178	.356	.483	.559	.584	.663	Z	1
1.222	1.374	1.577	1.755	2.012	2.189	2.494	3.818	5.166	6.668	Z	1
7.000	7.330	7.483								Z	1
0.000	.739	1.374	1.935	2.393	2.875	3.053	3.256	3.868	4.326	Y	2
4.323	4.018	3.711	3.330	2.924	2.718	2.591	2.207	1.824	1.336	Y	2
1.003	.546	0.000								Y	2
-.229	-.203	-.099	.003	.157	.310	.389	.389	.541	.569	Z	2
1.638	1.816	1.941	2.068	2.195	2.398	2.626	3.797	5.093	6.543	Z	2
7.000	7.330	7.432								Z	2
0.000	.765	1.400	1.910	2.393	2.824	3.104	3.386	3.894	4.300	Y	3
4.275	3.970	3.640	3.310	3.002	2.723	2.570	2.139	1.781	1.374	Y	3
1.069	.610	0.000								Y	3
-.381	-.356	-.254	-.127	-.025	.152	.229	.279	.406	.483	Z	3
1.910	2.012	2.088	2.139	2.240	2.418	2.697	4.021	5.116	6.363	Z	3
6.871	7.178	7.305								Z	3
0.000	.739	1.298	1.857	2.367	2.824	3.104	3.310	3.818	4.300	Y	4
4.275	3.894	3.589	3.284	2.926	2.647	2.469	2.037	1.704	1.374	Y	4
1.019	.610	0.000								Y	4
-.559	-.508	-.432	-.305	-.178	-.051	.076	.102	.229	.356	Z	4
1.935	2.062	2.139	2.164	2.240	2.367	2.748	4.072	5.192	6.236	Z	4
6.744	7.026	7.127								Z	4
0.000	.688	1.247	1.781	2.342	2.875	3.104	3.335	3.792	4.275	Y	5
4.275	4.021	3.741	3.437	2.951	2.697	2.469	2.037	1.679	1.349	Y	5
1.044	.508	0.000								Y	5
-.790	-.739	-.663	-.559	-.432	-.305	-.229	-.152	-.051	.051	Z	5
2.037	2.062	2.088	2.113	2.113	2.215	2.494	3.843	5.014	5.931	Z	5
6.388	6.693	6.795								Z	5
0.000	.739	1.323	1.882	2.418	2.951	3.208	3.462	3.894	4.249	Y	6
4.249	4.021	3.792	3.487	3.078	2.697	2.418	2.012	1.679	1.323	Y	6
.968	.508	0.000								Y	6
-1.603	-1.603	-1.577	-1.527	-1.476	-1.400	-1.349	-1.298	-1.222	-1.120	Z	6
1.273	1.247	1.247	1.196	1.196	1.247	1.501	2.545	3.665	4.760	Z	6
5.166	5.446	5.547								Z	6
0.000	.610	1.146	1.730	2.342	2.850	3.078	3.360	3.818	4.249	Y	7
4.275	3.970	3.716	3.411	3.129	2.748	2.443	2.037	1.679	1.323	Y	7
1.019	.584	0.000								Y	7
-1.374	-1.374	-1.374	-1.323	-1.273	-1.247	-1.196	-1.196	-1.095	-1.044	Z	7
.790	.739	.714	.663	.638	.714	.968	2.012	3.259	4.275	Z	7
4.735	5.039	5.116								Z	7
0.000	.663	1.250	1.885	2.443	2.979	3.157	3.310	3.767	4.328	Y	8
4.326	4.072	3.792	3.513	3.231	2.875	2.545	2.111	1.727	1.344	Y	8
1.011	.579	0.000								Y	8
-1.171	-1.171	-1.168	-1.118	-1.092	-1.039	-.988	-.988	-.912	-.808	Z	8
.561	.516	.462	.411	.386	.411	.665	1.732	3.030	4.176	Z	8
4.582	4.887	4.963								Z	8
0.000	.686	1.295	1.857	2.365	2.875	3.104	3.358	3.843	4.275	Y	9
4.277	3.995	3.716	3.411	3.183	2.901	2.621	2.116	1.709	1.356	Y	9
1.001	.594	0.000								Y	9
-.942	-.917	-.869	-.843	-.818	-.767	-.719	-.693	-.592	-.541	Z	9
.325	.274	.224	.173	.122	.122	.378	1.524	2.873	4.044	Z	9
4.478	4.757	4.862								Z	9
0.000	.688	1.247	1.831	2.418	2.926	3.129	3.310	3.792	4.249	Y	10
4.249	3.945	3.691	3.411	3.129	2.799	2.570	2.088	1.704	1.273	Y	10
.942	.508	0.000								Y	10
-.815	-.790	-.765	-.714	-.610	-.559	-.457	-.457	-.356	-.254	Z	10
-.076	-.152	-.178	-.254	-.305	-.203	.076	1.450	2.723	3.970	Z	10
4.402	4.658	4.760								Z	10
0.000	.584	1.092	1.654	2.239	2.850	3.002	3.231	3.792	4.326	Y	11
4.326	3.995	3.665	3.307	2.951	2.875	2.748	2.268	1.811	1.407	Y	11
1.077	.645	0.000								Y	11
-.790	-.765	-.739	-.716	-.640	-.513	-.490	-.439	-.312	-.211	Z	11
-.211	-.262	-.338	-.414	-.462	-.361	-.183	1.166	2.517	3.891	Z	11
4.326	4.630	4.785								Z	11
131.295	137.160	142.837								XFHS	3
0.000	.561	1.069	1.631	2.215	2.802	2.954	2.824	2.672	2.283	Y	1
1.981	1.676	1.344	1.036	.655	0.000					Y	1
-.765	-.787	-.762	-.711	-.642	-.505	-.480	-.328	-.147	1.072	Z	1
1.983	2.827	3.871	4.328	4.633	4.760					Z	1
0.000	.561	1.021	1.580	2.113	2.522	2.675	2.672	2.545	2.238	Y	2
1.956	1.674	1.298	1.008	.574	0.000					Y	2
-.765	-.737	-.762	-.683	-.640	-.554	-.452	-.274	.135	1.024	Z	2
1.989	2.931	3.922	4.354	4.658	4.785					Z	2
0.000	.584	1.041	1.527	1.984	2.365	2.570	2.621	2.570	2.212	Y	3
1.958	1.654	1.323	1.016	.610	0.000					Y	3
-.714	-.663	-.663	-.663	-.610	-.559	-.432	-.203	.127	1.044	Z	3
1.961	2.875	3.919	4.376	4.658	4.760					Z	3
111.597	9.065	-2.858								PPNNRG	
0.000	7.620	15.240	25.603							XPNN	
2.096	2.266	2.436	2.667							PPNR	
121.836	20.881	.254	19.784	135.285	24.232	9.462	6.335			FINNRG	
0.0	10.	20.	30.	40.	50.	60.	80.	90.	100.	XFIN	
0.0	.519	.819	1.039	1.161	1.203	1.161	.819	.519	0.0	FNRO	1.1

TABLE II.- Continued

(b) U.S. Customary Units. All linear dimensions in inches

SUPERSONIC CRUISE VEHICLE (MEASURED COORDINATES)																	
0	1	1	1	1	13	26	3	22	15	23	11	16	3	1	4	1	10
343.																	
0.0	.50	.75	1.25	2.50	5.0	7.5	10.	15.	20.								XAF 10
25.	30.	35.	40.	45.	50.	55.	60.	65.	70.								XAF 20
75.	80.	85.	90.	95.	100.												XAF 26
22.141	1.6851	-7.5	29.550														WORG 2
24.905	2.2512	-7.5	26.786														WORG 3
27.416	2.8093	-7.5	24.275														WORG 4
29.765	3.3726	-7.5	21.924														WORG 5
33.888	4.4445	-7.5	17.814														WORG 6
36.174	5.0576	-7.5	15.795														WORG 7
40.353	6.1828	-7.5	12.128														WORG 8
44.562	7.3058	-7.5	8.433														WORG 9
47.935	8.2221	-7.5	5.474														WORG 10
48.318	8.4216	-7.5	5.184														WORG 11
49.319	8.9922	-7.5	4.444														WORG 12
51.229	10.101	-7.5	3.046														WORG 13
53.194	11.239	-7.5	1.587														WORG 14
7.8260	7.8590	7.8635	7.8680	7.8885	7.9235	7.9475	7.9545	7.9390	7.9090								Z 2
7.8620	7.8010	7.7360	7.6770	7.6180	7.5715	7.5305	7.4955	7.4715	7.4585								Z 2
7.4520	7.4520	7.4540	7.4545	7.4555	7.4535												Z 2
7.7910	7.8045	7.8085	7.8155	7.8340	7.8695	7.8930	7.9025	7.8965	7.8745								Z 3
7.8350	7.7880	7.7370	7.6920	7.6465	7.6090	7.5755	7.5485	7.5305	7.5220								Z 3
7.5250	7.5295	7.5410	7.5545	7.5630	7.5685												Z 3
7.7250	7.7430	7.7460	7.7525	7.7725	7.8090	7.8355	7.8535	7.8575	7.8405								Z 4
7.8110	7.7770	7.7380	7.7055	7.6720	7.6400	7.6115	7.5880	7.5705	7.5615								Z 4
7.5610	7.5655	7.5755	7.5850	7.5925	7.5975												Z 4
7.6700	7.6805	7.6850	7.6925	7.7125	7.7520	7.7820	7.8005	7.8130	7.8090								Z 5
7.7915	7.7690	7.7430	7.7180	7.6930	7.6660	7.6430	7.6270	7.6145	7.6075								Z 5
7.6015	7.5960	7.5910	7.5855	7.5800	7.5770												Z 5
7.5645	7.5755	7.5785	7.5870	7.6075	7.6445	7.6765	7.7000	7.7310	7.7460								Z 6
7.7510	7.7480	7.7405	7.7315	7.7205	7.7090	7.6990	7.6895	7.6850	7.6850								Z 6
7.6870	7.6880	7.6865	7.6840	7.6780	7.6725												Z 6
7.5160	7.5240	7.5280	7.5360	7.5545	7.5915	7.6230	7.6490	7.6880	7.7100								Z 7
7.7250	7.7310	7.7310	7.7300	7.7265	7.7215	7.7170	7.7140	7.7125	7.7145								Z 7
7.7180	7.7230	7.7290	7.7300	7.7295	7.7260												Z 7
7.4390	7.4540	7.4580	7.4650	7.4815	7.5135	7.5450	7.5710	7.6120	7.6440								Z 8
7.6675	7.6855	7.6985	7.7095	7.7180	7.7255	7.7330	7.7405	7.7480	7.7580								Z 8
7.7650	7.7705	7.7780	7.7825	7.7885	7.7930												Z 8
7.4230	7.4320	7.4345	7.4385	7.4500	7.4720	7.4940	7.5150	7.5500	7.5805								Z 9
7.6070	7.6330	7.6570	7.6750	7.6945	7.7125	7.7285	7.7430	7.7575	7.7680								Z 9
7.7790	7.7890	7.7960	7.8080	7.8190	7.8260												Z 9
7.4390	7.4480	7.4505	7.4540	7.4625	7.4760	7.4895	7.5020	7.5260	7.5475								Z 10
7.5695	7.5905	7.6110	7.6310	7.6525	7.6690	7.6825	7.6955	7.7105	7.7250								Z 10
7.7385	7.7510	7.7630	7.7735	7.7830	7.7925												Z 10
7.4560	7.4615	7.4635	7.4660	7.4720	7.4830	7.4935	7.5025	7.5210	7.5390								Z 11
7.5565	7.5740	7.5930	7.6115	7.6290	7.6455	7.6605	7.6755	7.6910	7.7060								Z 11
7.7200	7.7340	7.7465	7.7585	7.7690	7.7790												Z 11
7.5030	7.5050	7.5060	7.5070	7.5100	7.5150	7.5205	7.5260	7.5375	7.5480								Z 12
7.5595	7.5710	7.5830	7.5960	7.6080	7.6195	7.6325	7.6455	7.6585	7.6705								Z 12
7.6835	7.6950	7.7060	7.7160	7.7255	7.7340												Z 12
7.5535	7.5550	7.5560	7.5580	7.5610	7.5635	7.5655	7.5675	7.5720	7.5760								Z 13
7.5810	7.5855	7.5905	7.5960	7.6010	7.6060	7.6110	7.6160	7.6210	7.6250								Z 13
7.6290	7.6335	7.6365	7.6395	7.6430	7.6465												Z 13
7.5515	7.5520	7.5520	7.5530	7.5540	7.5545	7.5550	7.5555	7.5560	7.5565								Z 14
7.5575	7.5590	7.5590	7.5595	7.5595	7.5595	7.5595	7.5590	7.5590	7.5590								Z 14
7.5590	7.5585	7.5585	7.5580	7.5585	7.5630												Z 14
0.0	.2415	.2930	.3675	.5205	.7085	.8510	.9765	1.1750	1.3190								T 2
1.4285	1.5075	1.5570	1.5830	1.5915	1.6030	1.5920	1.5455	1.4655	1.3430								T 2
1.1945	1.0180	.8120	.5730	.3010	0.0												T 2
0.0	.2355	.2885	.3735	.5145	.7025	.8490	.9715	1.1655	1.3050								T 3
1.4160	1.4950	1.5455	1.5710	1.5835	1.5935	1.5820	1.5355	1.4665	1.3170								T 3
1.1805	1.0115	.8045	.5670	.2970	0.0												T 3
0.0	.2310	.2865	.3625	.5000	.6935	.8395	.9470	1.1380	1.2835								T 4
1.3920	1.4700	1.5190	1.5460	1.5575	1.5595	1.5510	1.5110	1.4170	1.2975								T 4
1.1655	.9930	.7915	.5585	.2930	0.0												T 4
0.0	.2255	.2790	.3555	.4875	.6655	.8045	.9215	1.1160	1.2520								T 5
1.3575	1.4350	1.4850	1.5105	1.5205	1.5210	1.5070	1.4575	1.3780	1.2740								T 5
1.1390	.9730	.7765	.5455	.2875	0.000												T 5
0.0	.2245	.2710	.3420	.4665	.6560	.7960	.9005	1.0720	1.1925								T 6
1.2895	1.3625	1.4115	1.4365	1.4490	1.4500	1.4290	1.3870	1.3150	1.2160								T 6
1.0855	.9265	.7390	.5205	.2750	0.0												T 6
0.0	.2140	.2600	.3315	.4585	.6285	.7640	.8715	1.0420	1.1630								T 7
1.2535	1.3240	1.3745	1.4030	1.4145	1.4155	1.3945	1.3495	1.2805	1.1860								T 7
1.0605	.9020	.6995	.5020	.2645	0.0												T 7
0.0	.1685	.2275	.3090	.4430	.6170	.7350	.8480	1.0240	1.1515								T 8
1.2515	1.3200	1.3580	1.3815	1.3925	1.3865	1.3670	1.3260	1.2545	1.1565								T 8
1.0335	.8665	.6830	.4920	.2625	0.0												T 8
0.0	.2165	.2600	.3305	.4650	.6240	.7490	.8510	1.0285	1.1630								T 9
1.2695	1.3290	1.3490	1.3935	1.3935	1.3855	1.3565	1.3040	1.2380	1.1365								T 9
1.0130	.8435	.6390	.4735	.2600	0.0												T 9
0.0	.1675	.2135	.2715	.3845	.5190	.6310	.7440	.9315	1.0895								T 10
1.2295	1.3440	1.4335	1.4865	1.5505	1.5490	1.4875	1.4090	1.3500	1.2470								T 10
1.1265	.9855	.8125	.6035	.3605	0.0												T 10
0.0	.1550	.1895	.2335	.3270	.4545	.5560	.6660	.8165	.9665								T 11
1.1035	1.2225	1.3145	1.3735	1.4070	1.4210	1.4095	1.3695	1.3050	1.2170								T 11
1.1095	.9800	.8320	.6480	.4330	0.0												T 11
0.0	.1345																

TABLE II. - Continued

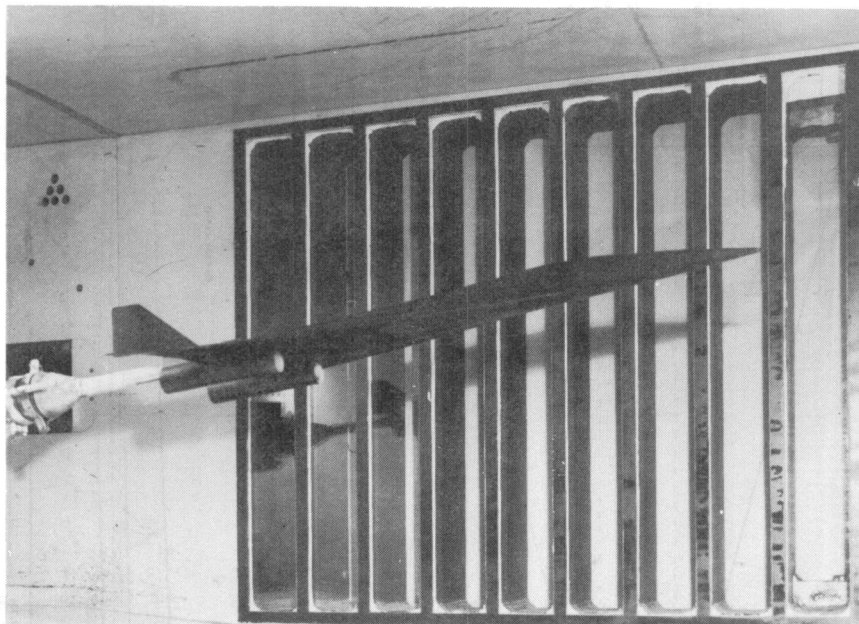
(b) Continued

.9985	1.0930	1.1695	1.2235	1.2525	1.2645	1.2505	1.2165	1.1800	1.1145	T 13
1.0290	.9220	.7975	.6510	.4825	0.0					T 13
0.0	.1205	.1805	.2970	.4245	.5215	.6285	.7255	.8840	1.0230	T 14
1.1085	1.1420	1.1940	1.2335	1.2515	1.2630	1.2660	1.2455	1.2150	1.1700	T 14
1.1185	1.0640	.9855	.8895	.7270	0.0					T 14
5.780	6.131	6.850	7.151	7.781	8.400	9.820	11.251	13.350	16.331	XFHS 10
18.751	19.600	20.485	21.494	22.501						XFHS 15
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Y 1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Y 1
0.0	0.0									Y 1
.951	.951	.951	.951	.951	.951	.951	.951	.951	.951	Z 1
.951	.951	.951	.951	.951	.951	.951	.951	.951	.951	Z 1
.951	.951									Z 1
0.0	.017	.037	.037	.047	.047	.057	.057	.057	.057	Y 2
.057	.057	.057	.057	.058	.058	.058	.048	.048	.038	Y 2
.008	0.0									Y 2
.911	.911	.911	.911	.921	.921	.921	.921	.921	.921	Z 2
.921	.921	.921	.931	.941	.941	.951	.961	.971	1.001	Z 2
1.011	1.011									Z 2
0.0	.027	.057	.077	.107	.137	.157	.177	.197	.197	Y 3
.197	.197	.197	.197	.137	.178	.168	.148	.128	.099	Y 3
.039	0.0									Y 3
.861	.871	.871	.870	.870	.870	.870	.870	.890	.890	Z 3
.890	.890	.890	.920	.940	.970	1.000	1.030	1.070	1.101	Z 3
1.131	1.142									Z 3
0.0	.017	.067	.107	.137	.187	.217	.257	.258	.258	Y 4
.258	.258	.258	.248	.238	.228	.218	.209	.189	.150	Y 4
.070	0.0									Y 4
.841	.841	.851	.840	.840	.850	.859	.859	.879	.879	Z 4
.879	.879	.869	.889	.909	.939	.979	1.010	1.050	1.120	Z 4
1.181	1.202									Z 4
0.0	.075	.135	.175	.235	.295	.346	.376	.416	.416	Y 5
.416	.416	.386	.366	.336	.317	.297	.287	.277	.218	Y 5
.118	0.0									Y 5
.791	.791	.790	.800	.800	.799	.809	.819	.828	.848	Z 5
.848	.878	.889	.929	.949	.989	1.039	1.070	1.130	1.210	Z 5
1.281	1.302									Z 5
0.0	.098	.178	.258	.318	.378	.438	.489	.529	.549	Y 6
.539	.529	.499	.470	.430	.420	.411	.391	.372	.283	Y 6
.174	0.0									Y 6
.751	.750	.749	.748	.758	.757	.766	.776	.796	.815	Z 6
.806	.846	.866	.886	.927	.967	1.007	1.057	1.128	1.269	Z 6
1.360	1.412									Z 6
0.0	.154	.244	.335	.445	.545	.615	.695	.766	.796	Y 7
.796	.766	.716	.676	.606	.597	.587	.518	.440	.340	Y 7
.201	0.0									Y 7
.651	.650	.649	.649	.658	.667	.677	.706	.716	.736	Z 7
.736	.766	.806	.827	.847	.907	.998	1.178	1.389	1.520	Z 7
1.621	1.652									Z 7
0.0	.154	.265	.375	.515	.635	.756	.846	.926	.986	Y 8
.986	.947	.897	.817	.747	.728	.679	.601	.503	.374	Y 8
.224	0.0									Y 8
.571	.570	.579	.578	.597	.606	.635	.654	.674	.693	Z 8
.693	.724	.754	.765	.805	.886	1.046	1.307	1.608	1.769	Z 8
1.871	1.902									Z 8
0.0	.193	.343	.494	.654	.794	.905	1.025	1.125	1.195	Y 9
1.185	1.126	1.046	.956	.886	.856	.768	.621	.493	.394	Y 9
.215	0.0									Y 9
.440	.439	.448	.457	.486	.505	.535	.554	.573	.593	Z 9
.603	.623	.664	.684	.705	.785	1.116	1.548	1.899	2.030	Z 9
2.151	2.183									Z 9
0.0	.202	.393	.583	.774	.984	1.104	1.225	1.285	1.335	Y 10
1.345	1.295	1.225	1.135	1.045	1.006	.850	.644	.536	.417	Y 10
.218	0.0									Y 10
.300	.309	.318	.346	.365	.414	.443	.462	.482	.501	Z 10
.521	.532	.542	.553	.573	.664	1.206	1.858	2.199	2.380	Z 10
2.502	2.563									Z 10
0.000	.210	.380	.591	.831	1.051	1.191	1.292	1.372	1.442	Y 11
1.442	1.372	1.302	1.232	1.141	1.091	.871	.701	.531	.400	Y 11
.220	0.000									Y 11
.170	.170	.180	.200	.230	.280	.310	.330	.340	.380	Z 11
.380	.411	.451	.471	.551	.681	1.372	1.982	2.473	2.663	Z 11
2.773	2.823									Z 11
0.0	.170	.320	.521	.781	1.021	1.131	1.242	1.362	1.442	Y 12
1.442	1.382	1.302	1.211	1.131	1.081	.841	.671	.521	.431	Y 12
.230	0.0									Y 12
.140	.130	.130	.160	.190	.240	.260	.290	.310	.330	Z 12
.330	.411	.471	.551	.641	.761	1.522	2.103	2.543	2.713	Z 12
2.843	2.894									Z 12
0.0	.250	.441	.611	.791	.992	1.152	1.282	1.422	1.482	Y 13
1.482	1.432	1.323	1.213	1.143	1.063	.834	.665	.515	.405	Y 13
.225	0.0									Y 13
.090	.090	.109	.129	.149	.199	.238	.258	.288	.318	Z 13
.318	.428	.518	.619	.719	.829	1.601	2.162	2.602	2.783	Z 13
2.893	2.944									Z 13
0.000	.270	.471	.661	.841	1.041	1.211	1.382	1.552	1.582	Y 14
1.582	1.522	1.412	1.242	1.121	1.041	.831	.661	.521	.411	Y 14
.230	0.0									Y 14
.010	.020	.050	.080	.120	.170	.220	.240	.270	.330	Z 14
.320	.471	.581	.691	.791	.911	1.642	2.193	2.613	2.763	Z 14
2.904	2.944									Z 14
0.0	.240	.451	.651	.851	1.061	1.232	1.432	1.582	1.692	Y 15

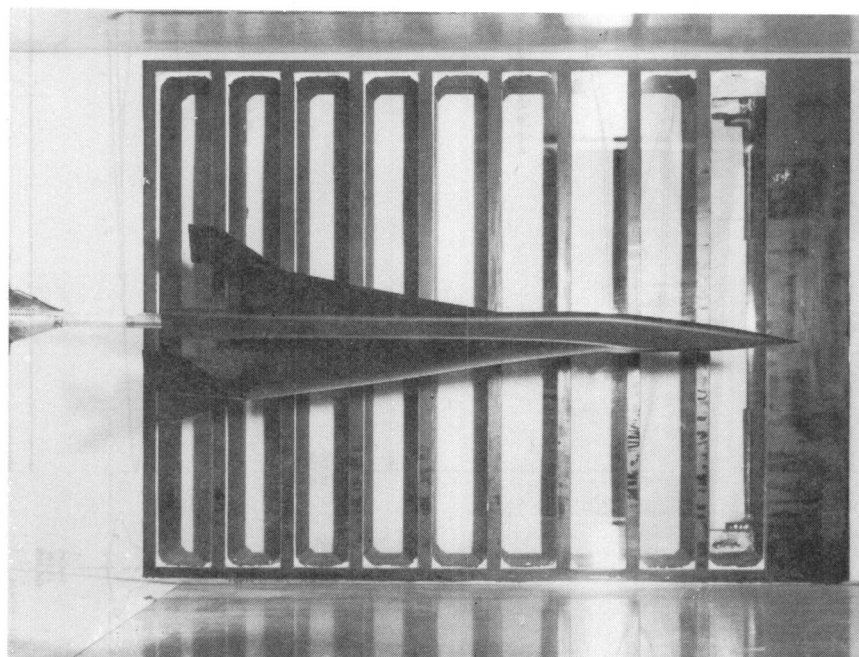
TABLE II.- Concluded

(b) Concluded

1.692	1.562	1.472	1.312	1.131	1.041	.871	.701	.521	.421	Y	15
.260	0.0									Y	15
-.030	-.020	-.010	.030	.090	.150	.190	.230	.260	.260	Z	15
.481	.581	.671	.751	.821	.991	1.512	2.022	2.423	2.753	Z	15
2.884	2.934									Z	15
22.501	23.701	24.901	25.851	27.791	38.291	44.291	46.541	48.790	51.251	XFHS	10
51.591										XFHS	11
0.0	.240	.461	.641	.832	1.062	1.232	1.433	1.583	1.693	Y	1
1.693	1.613	1.523	1.413	1.232	1.102	1.032	.862	.701	.521	Y	1
.431	.261	0.000								Y	1
-.030	-.020	-.010	.030	.070	.140	.190	.220	.230	.261	Z	1
.481	.541	.621	.691	.792	.862	.982	1.503	2.034	2.625	Z	1
2.756	2.886	2.946								Z	1
.000	.291	.541	.762	.942	1.132	1.202	1.282	1.523	1.703	Y	2
1.702	1.582	1.461	1.311	1.151	1.070	1.020	.869	.718	.526	Y	2
.395	.215	0.0								Y	2
-.090	-.080	-.039	.001	.062	.122	.153	.153	.213	.224	Z	2
.645	.715	.764	.814	.864	.944	1.034	1.495	2.005	2.576	Z	2
2.756	2.886	2.926								Z	2
0.000	.301	.551	.752	.942	1.112	1.222	1.333	1.533	1.693	Y	3
1.683	1.563	1.433	1.303	1.192	1.072	1.012	.862	.701	.541	Y	3
.421	.240	0.000								Y	3
-.150	-.140	-.100	-.050	-.010	.060	.090	.110	.160	.190	Z	3
.752	.792	.822	.842	.882	.952	1.062	1.583	2.014	2.505	Z	3
2.705	2.826	2.876								Z	3
0.0	.291	.511	.731	.932	1.112	1.222	1.303	1.503	1.693	Y	4
1.683	1.533	1.413	1.293	1.152	1.042	.972	.802	.671	.541	Y	4
.401	.24	0.0								Y	4
-.220	-.200	-.170	-.120	-.070	-.020	.030	.040	.090	.140	Z	4
.762	.812	.842	.852	.882	.932	1.082	1.603	2.044	2.455	Z	4
2.655	2.766	2.806								Z	4
0.000	.271	.491	.701	.922	1.132	1.222	1.313	1.493	1.683	Y	5
1.683	1.583	1.473	1.353	1.162	1.062	.972	.802	.661	.531	Y	5
.411	.200	0.0								Y	5
-.311	-.291	-.261	-.220	-.170	-.120	-.090	-.060	-.020	.020	Z	5
.802	.812	.822	.832	.832	.872	.982	1.513	1.974	2.335	Z	5
2.515	2.635	2.675								Z	5
0.0	.291	.521	.741	.952	1.162	1.263	1.363	1.533	1.673	Y	6
1.673	1.583	1.493	1.373	1.212	1.062	.952	.792	.661	.521	Y	6
.381	.200	0.000								Y	6
-.631	-.631	-.621	-.601	-.581	-.551	-.531	-.511	-.481	-.441	Z	6
.501	.491	.491	.471	.471	.491	.591	1.002	1.443	1.874	Z	6
2.034	2.144	2.184								Z	6
0.000	.240	.451	.681	.922	1.122	1.212	1.323	1.503	1.673	Y	7
1.683	1.563	1.463	1.343	1.232	1.082	.962	.802	.661	.521	Y	7
.401	.230	0.0								Y	7
-.541	-.541	-.541	-.521	-.501	-.491	-.471	-.471	-.431	-.411	Z	7
.311	.291	.281	.261	.251	.281	.381	.792	1.283	1.683	Z	7
1.864	1.984	2.014								Z	7
0.0	.261	.492	.742	.962	1.173	1.243	1.303	1.483	1.704	Y	8
1.703	1.603	1.493	1.383	1.272	1.132	1.002	.831	.680	.529	Y	8
.398	.228	0.0								Y	8
-.461	-.461	-.460	-.440	-.430	-.409	-.389	-.389	-.359	-.318	Z	8
.213	.203	.182	.162	.152	.162	.262	.682	1.193	1.644	Z	8
1.804	1.924	1.954								Z	8
0.0	.270	.510	.731	.931	1.132	1.222	1.322	1.513	1.683	Y	9
1.684	1.573	1.463	1.343	1.253	1.142	1.032	.833	.673	.534	Y	9
.394	.234	0.0								Y	9
-.371	-.361	-.342	-.332	-.322	-.302	-.283	-.273	-.233	-.213	Z	9
.128	.108	.088	.068	.048	.048	.149	.600	1.131	1.592	Z	9
1.763	1.873	1.914								Z	9
0.0	.271	.491	.721	.952	1.152	1.232	1.303	1.493	1.673	Y	10
1.673	1.553	1.453	1.343	1.232	1.102	1.012	.822	.671	.501	Y	10
.371	.200	0.0								Y	10
-.321	-.311	-.301	-.281	-.240	-.220	-.180	-.180	-.140	-.100	Z	10
-.030	-.060	-.070	-.100	-.120	-.080	.030	.571	1.072	1.563	Z	10
1.733	1.834	1.874								Z	10
0.0	.230	.430	.651	.881	1.122	1.182	1.272	1.493	1.703	Y	11
1.703	1.573	1.443	1.302	1.162	1.132	1.082	.893	.713	.554	Y	11
.424	.254	0.0								Y	11
-.311	-.301	-.291	-.282	-.252	-.202	-.193	-.173	-.123	-.083	Z	11
-.083	-.103	-.133	-.163	-.182	-.142	-.072	.459	.991	1.532	Z	11
1.703	1.823	1.884								Z	11
51.691	54.000	56.235								XFHS	3
.000	.221	.421	.642	.872	1.103	1.163	1.112	1.052	.891	Y	1
.780	.660	.529	.408	.258	0.0					Y	1
-.301	-.310	-.300	-.280	-.249	-.199	-.189	-.179	-.058	.422	Z	1
.773	1.113	1.524	1.704	1.824	1.874					Z	1
0.0	.221	.402	.622	.832	.993	1.053	1.052	1.002	.881	Y	2
.770	.659	.507	.397	.226	0.0					Y	2
-.301	-.290	-.300	-.269	-.248	-.218	-.178	-.108	.053	.403	Z	2
.783	1.154	1.544	1.714	1.834	1.884					Z	2
0.0	.23	.41	.601	.781	.931	1.012	1.032	1.012	.871	Y	3
.771	.651	.521	.400	.240	0.0					Y	3
-.281	-.261	-.261	-.261	-.240	-.220	-.170	-.080	.050	.411	Z	3
.772	1.132	1.543	1.723	1.834	1.874					Z	3
43.936	3.569	-1.125								PPDRRG	
0.0	3.0	6.0	10.03							XPDR	
.825	.892	.959	1.05							PPDR	
47.967	8.221	.10	7.789	53.262	9.54	3.725	2.494			FINDRG	
0.0	10.	20.	30.	40.	50.	60.	80.	90.	100.	XFJN	
0.0	.519	.819	1.039	1.161	1.203	1.161	.819	.519	0.0	FNDR	1.1



L-78-2240



L-78-2241

Figure 1.- Model installed in Langley Unitary Plan wind tunnel.

Figure 2.- Three-view sketch of model. All linear dimensions are in centimeters (inches).

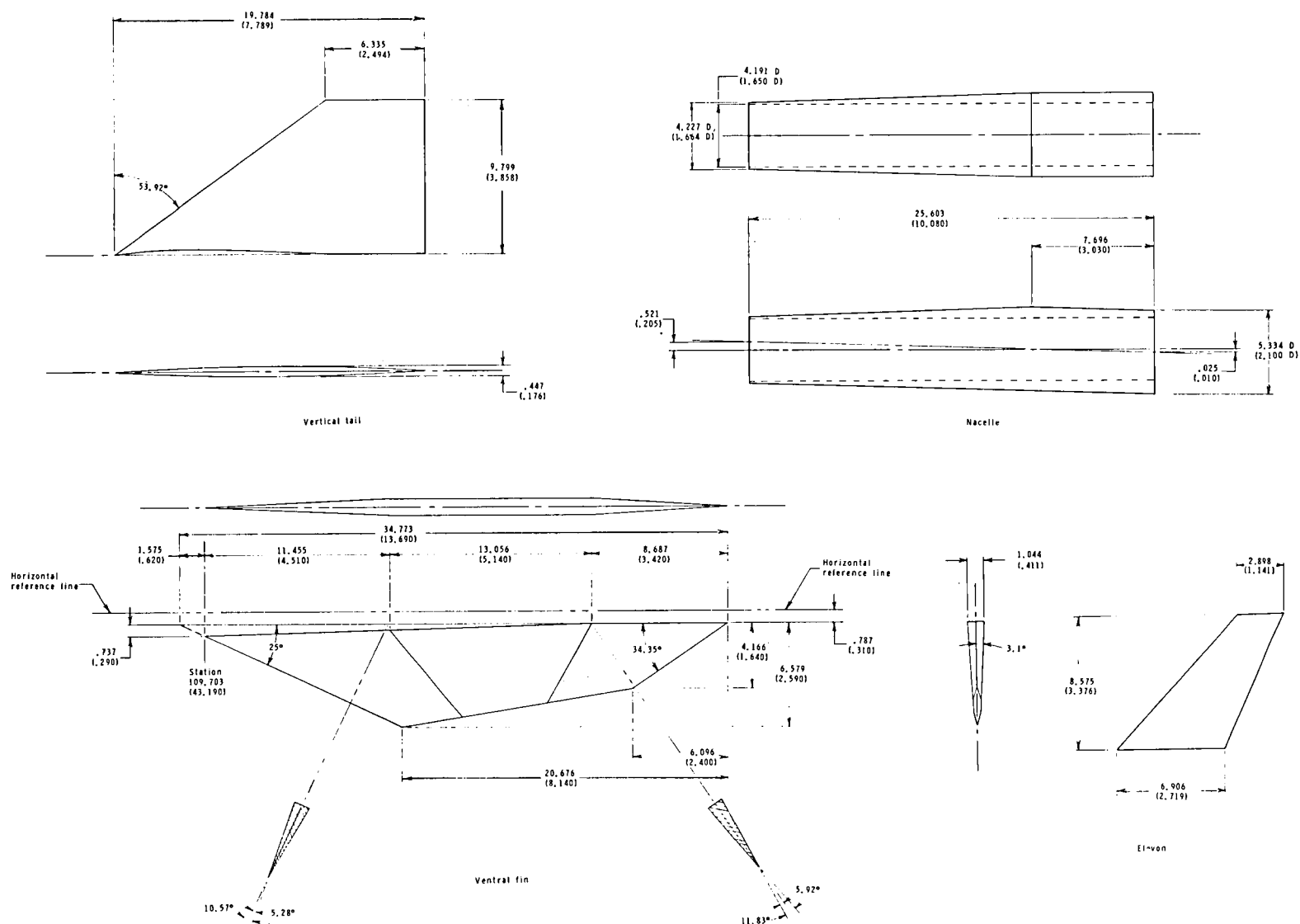


Figure 3.- Details of vertical tail, ventral fin, nacelle, and elevon. All dimensions are in centimeters (inches).

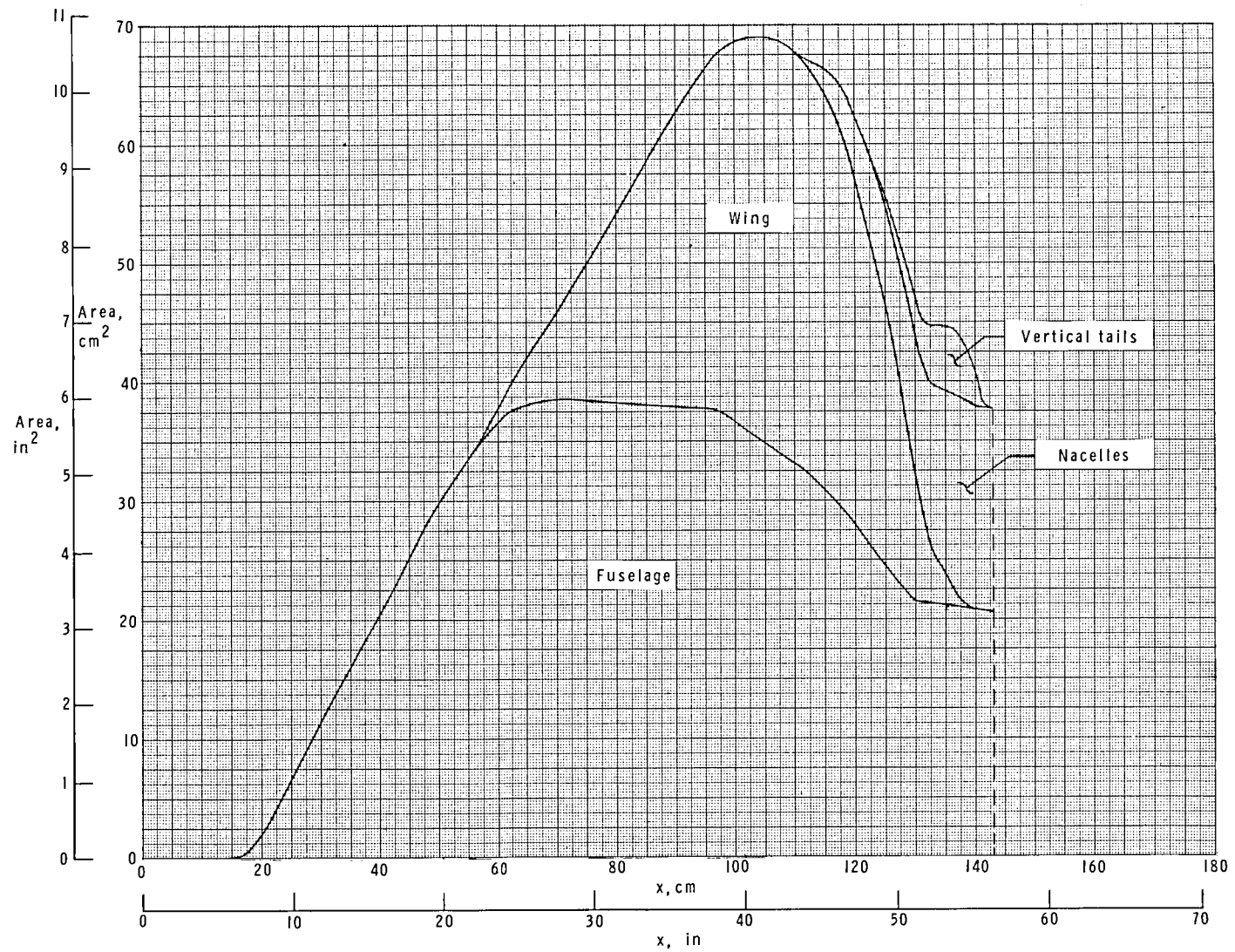


Figure 4.- Normal area distribution for model without ventral fin; capture area is removed.

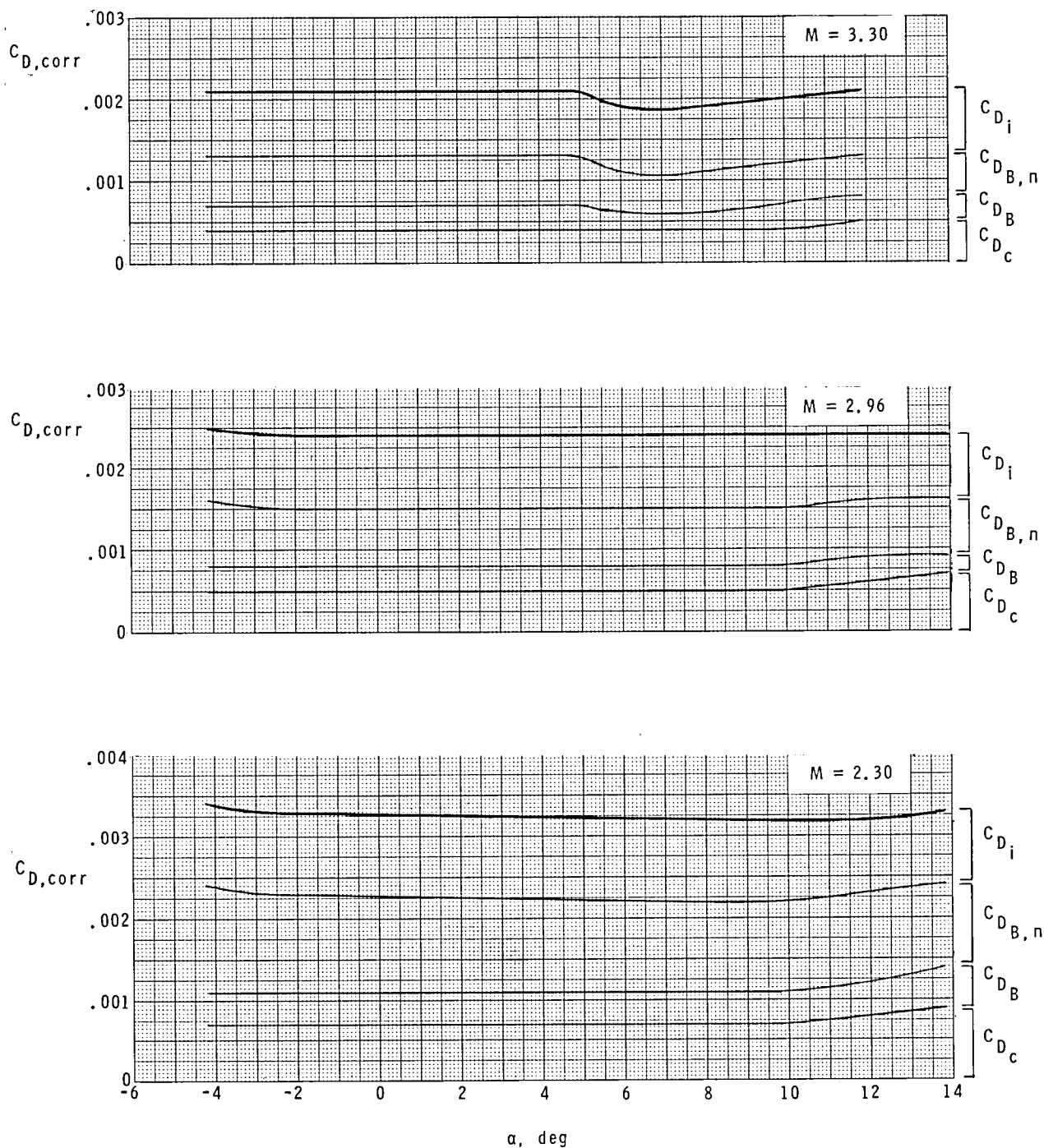
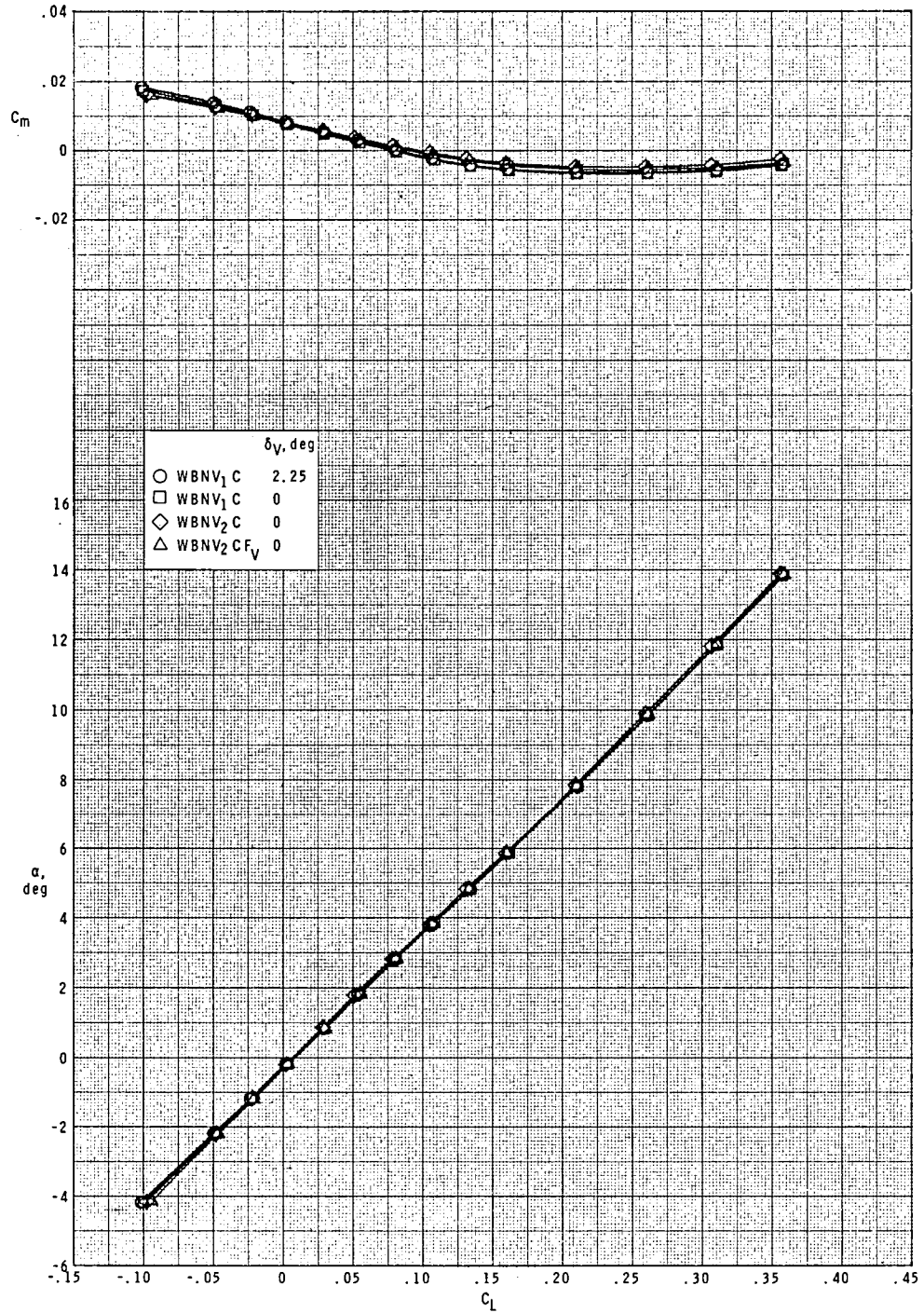
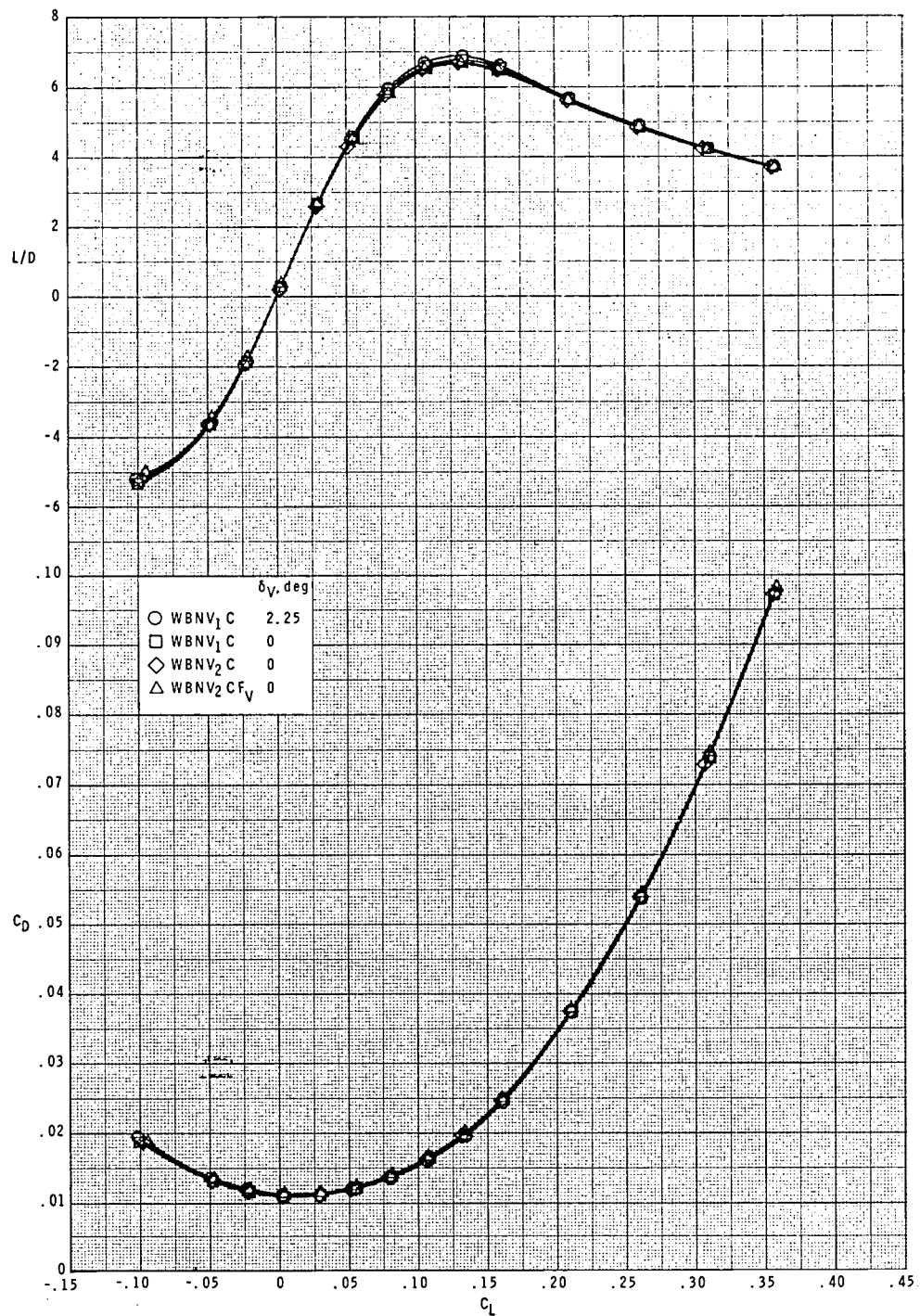


Figure 5.- Typical base, chamber, nacelle base, and nacelle internal flow drag corrections.



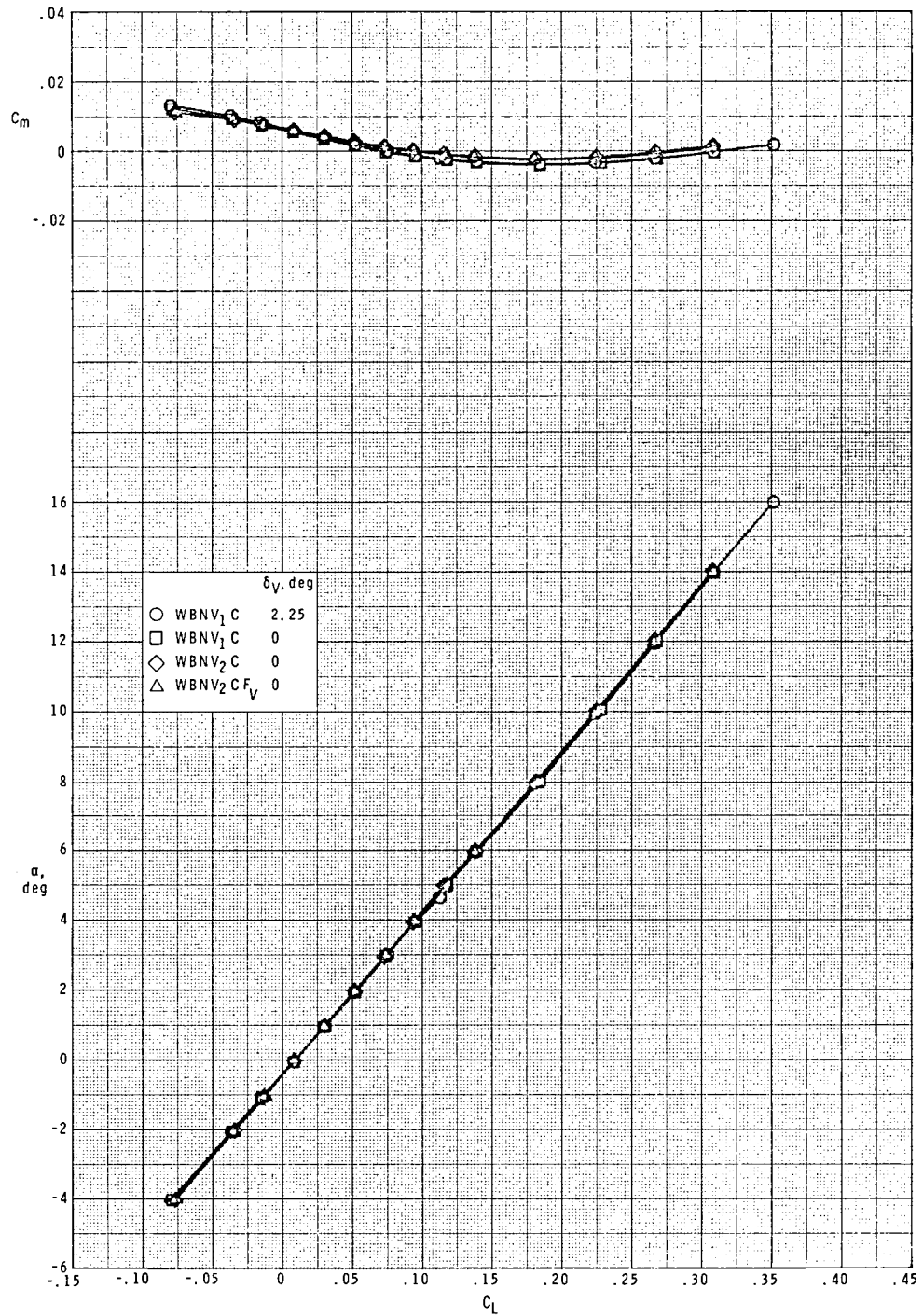
(a) $M = 2.30$.

Figure 6.- Effect of vertical tail orientation and ventral fin on longitudinal aerodynamic characteristics.



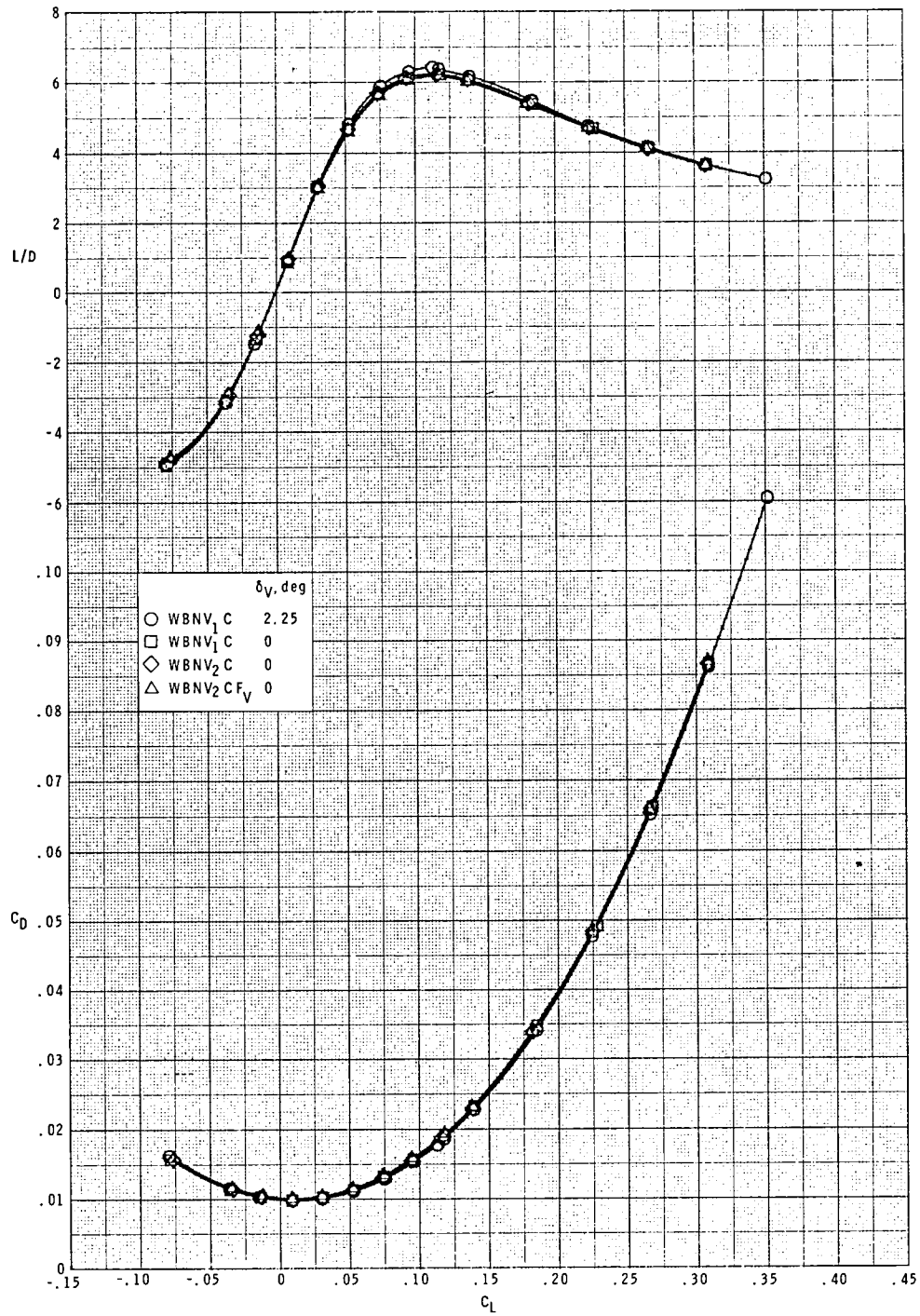
(a) Concluded.

Figure 6.- Continued.



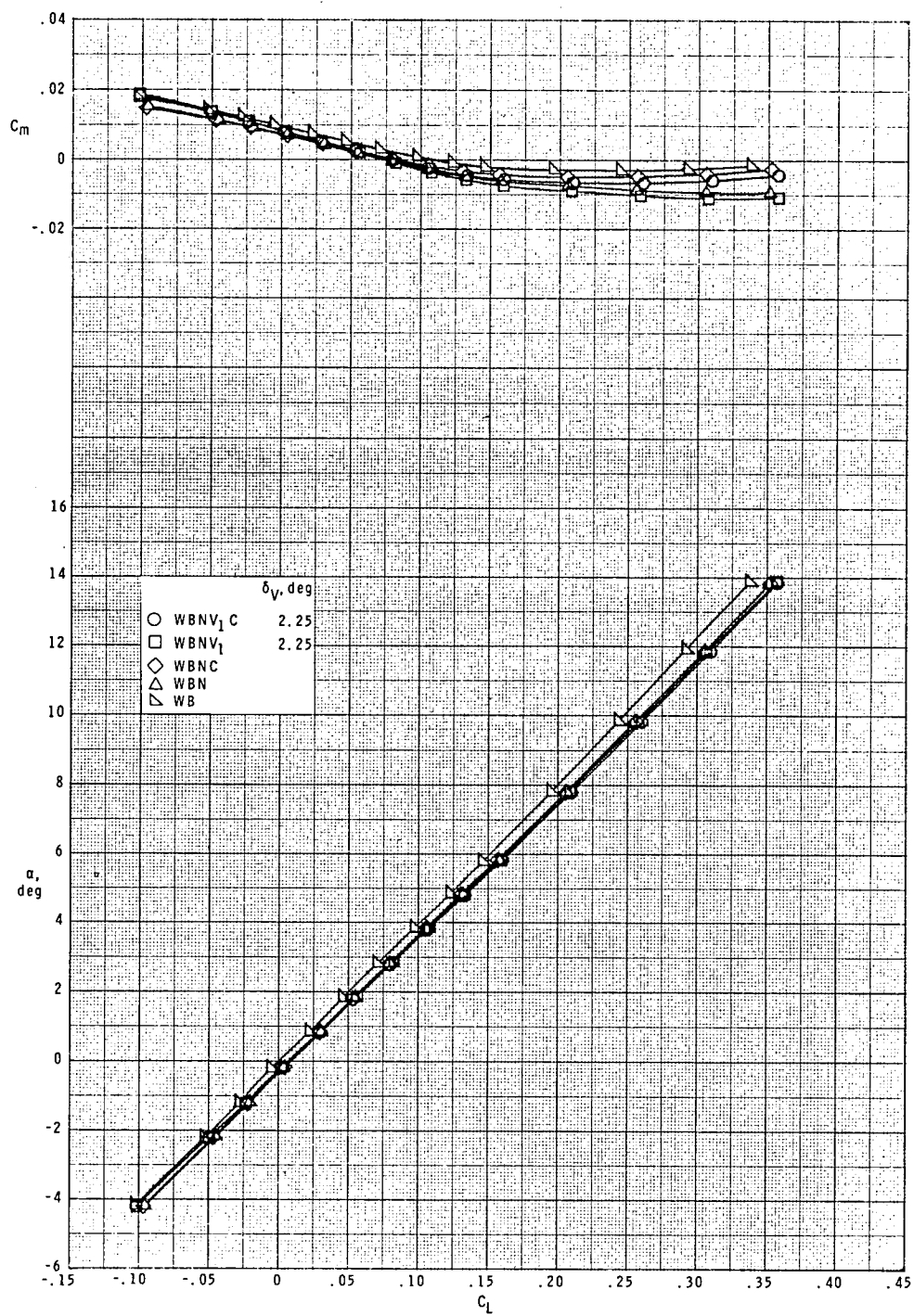
(b) $M = 2.96$.

Figure 6.- Continued.



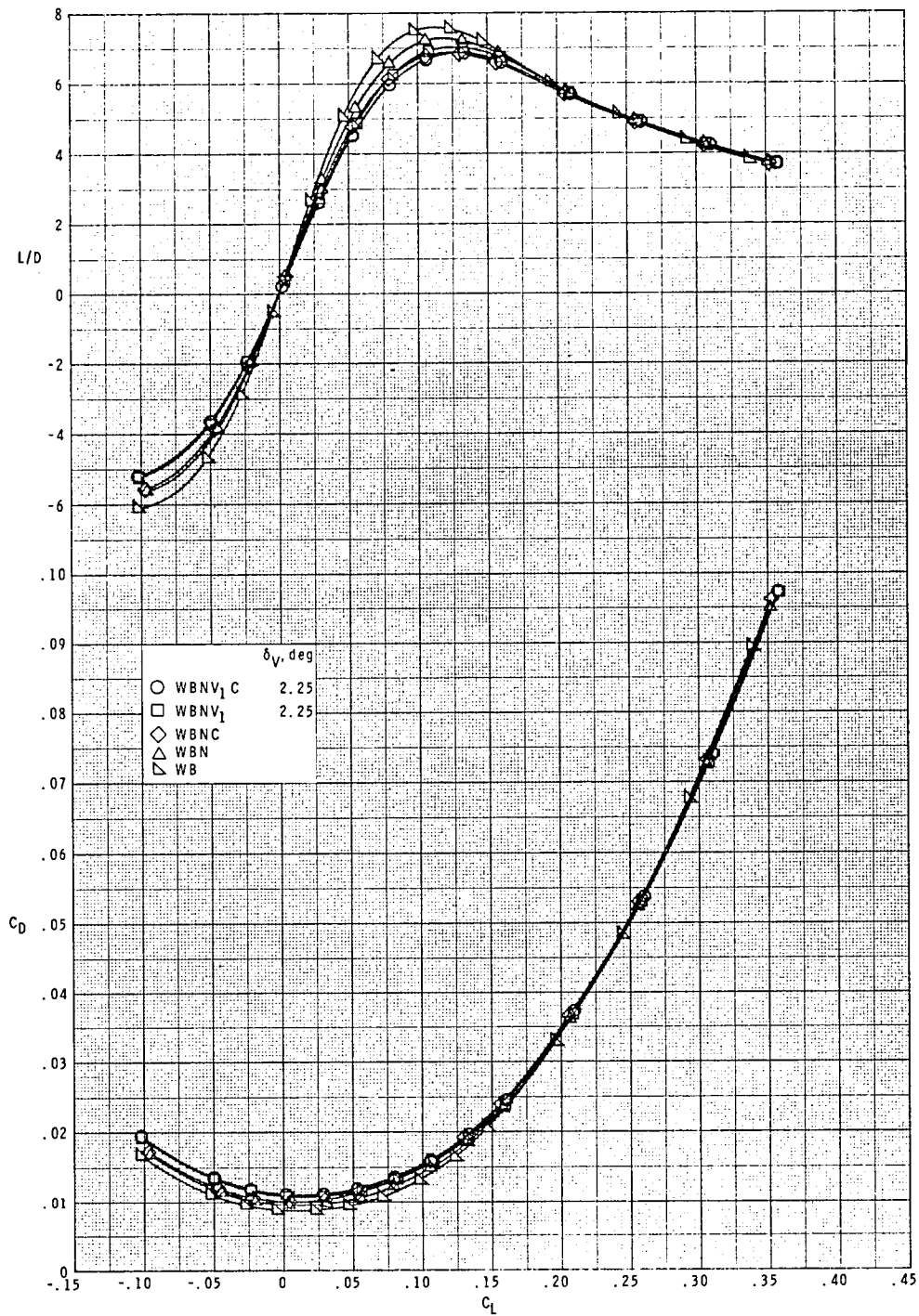
(b) Concluded.

Figure 6.- Concluded.



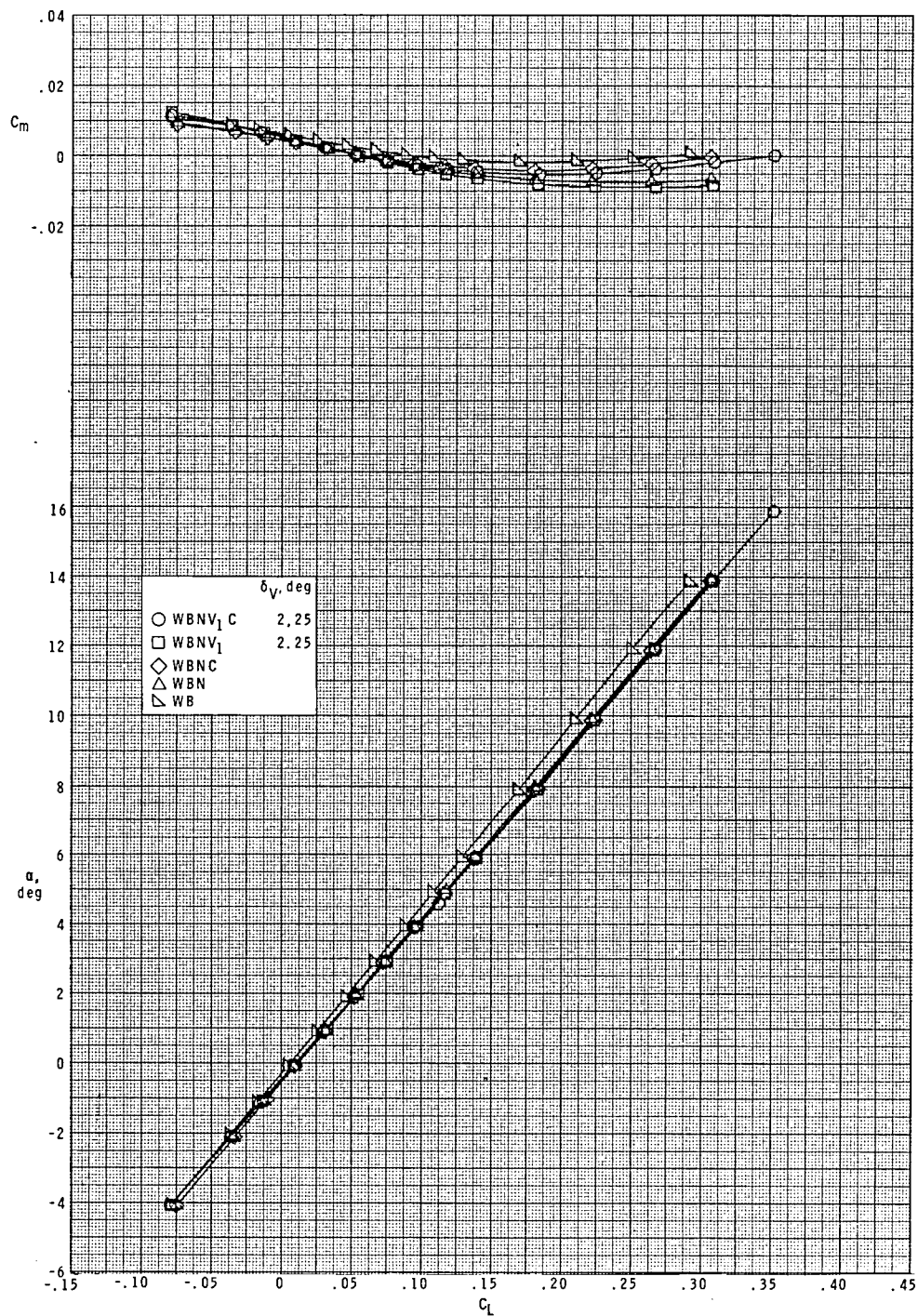
(a) $M = 2.30$.

Figure 7.- Effects of components on longitudinal aerodynamic characteristics of model.



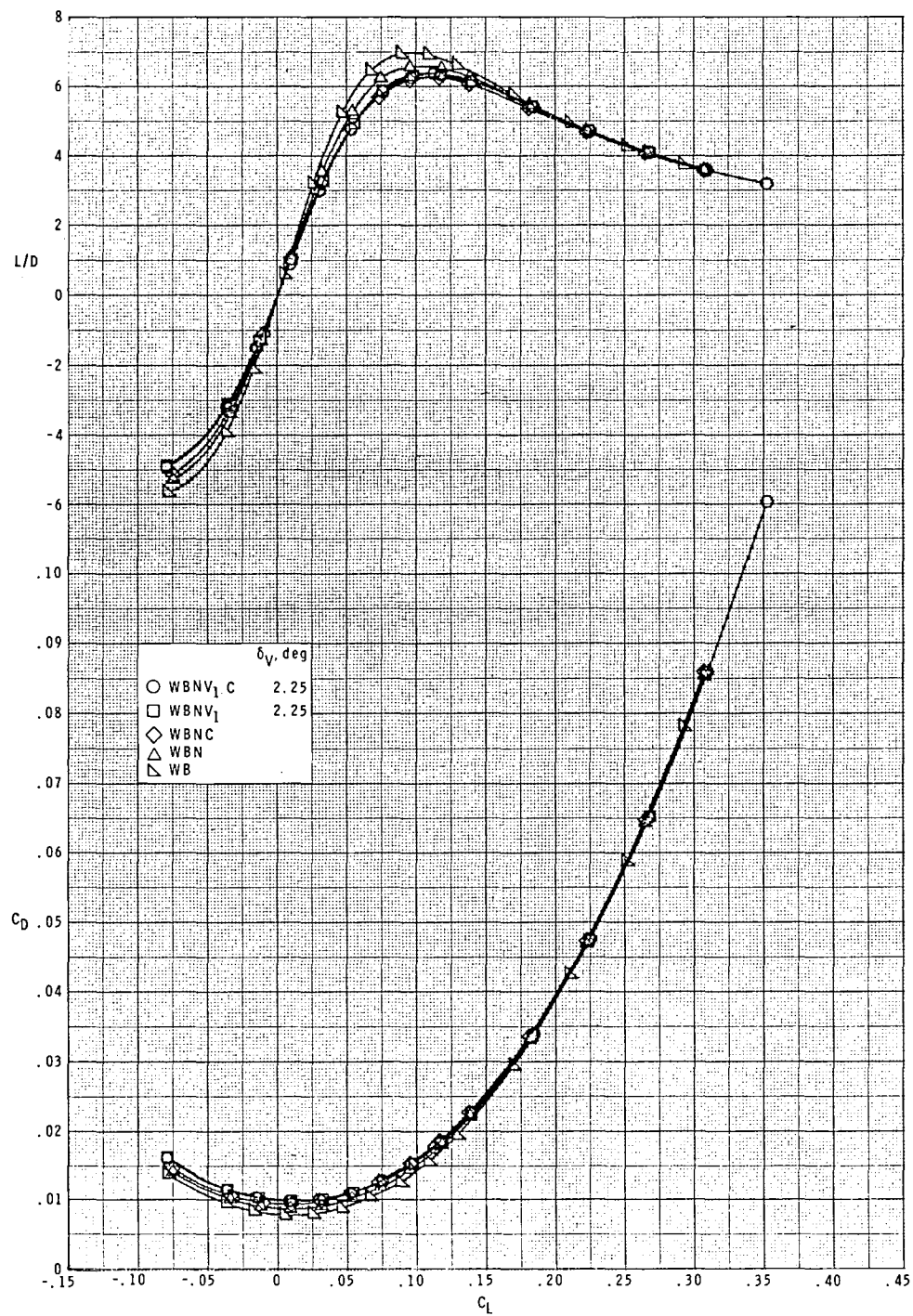
(a) Concluded.

Figure 7.- Continued.



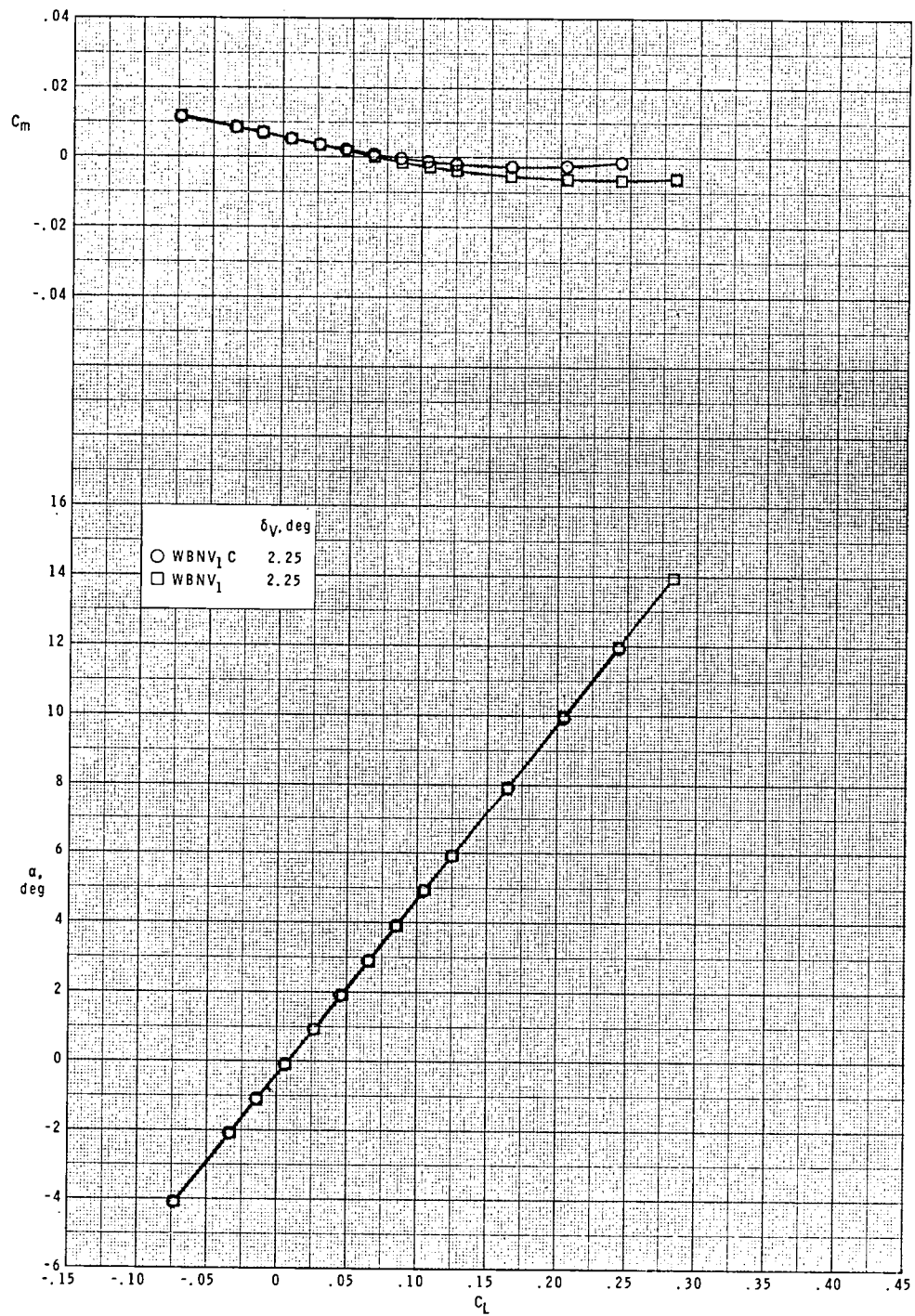
(b) $M = 2.96$.

Figure 7.- Continued.



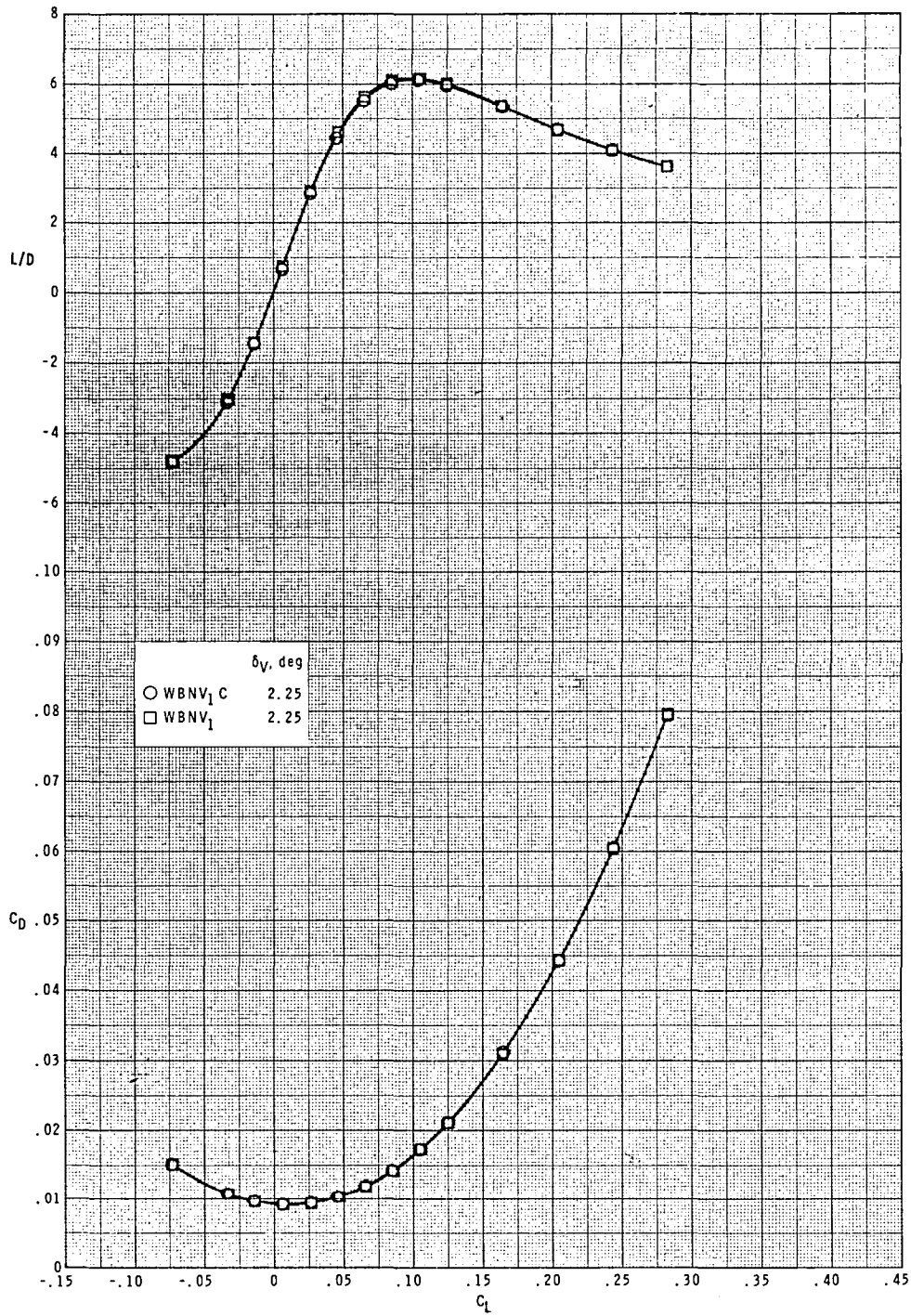
(b) Concluded.

Figure 7.- Continued.



(c) $M = 3.30$.

Figure 7.- Continued.



(c) Concluded.

Figure 7.- Concluded.

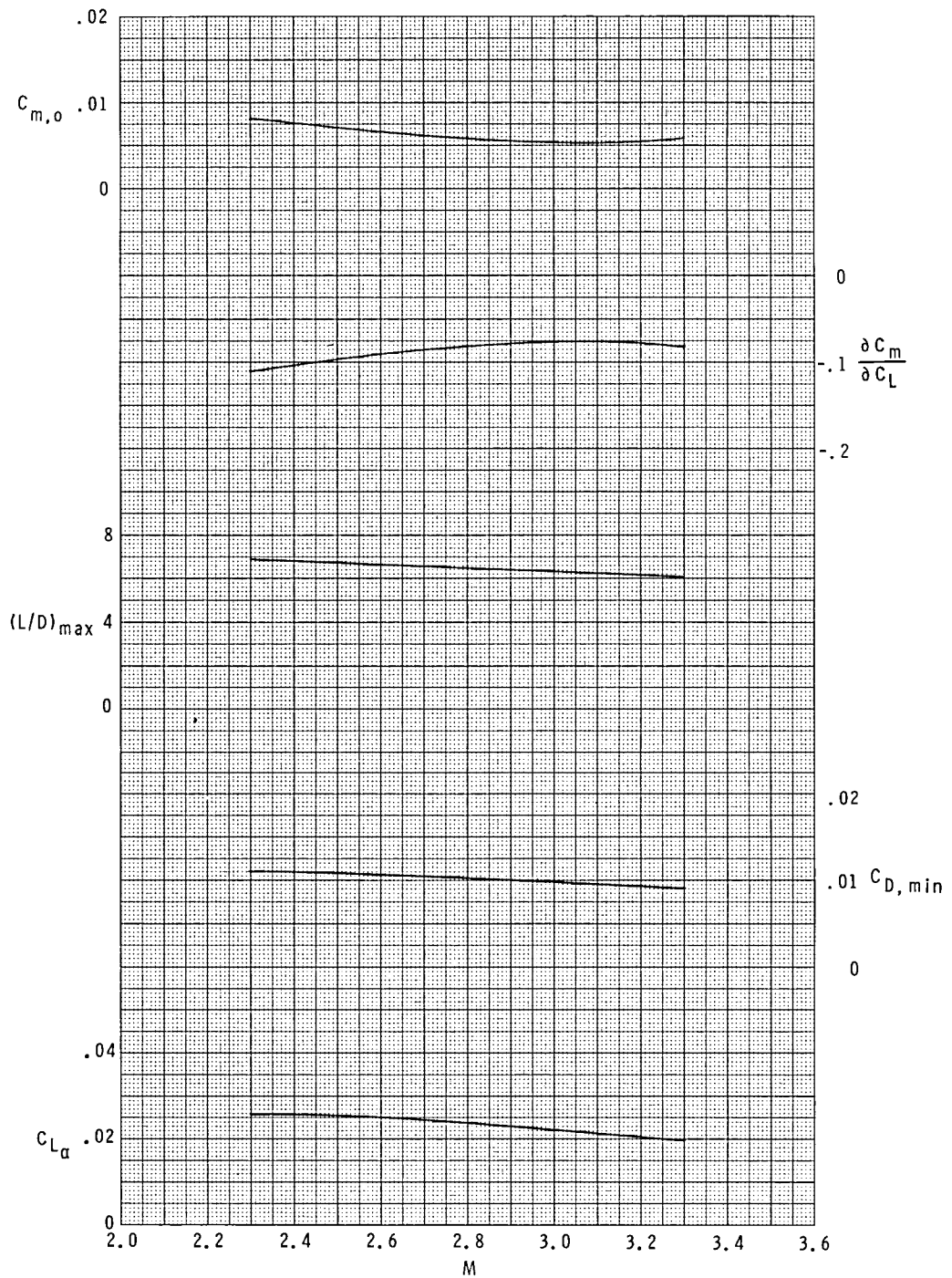
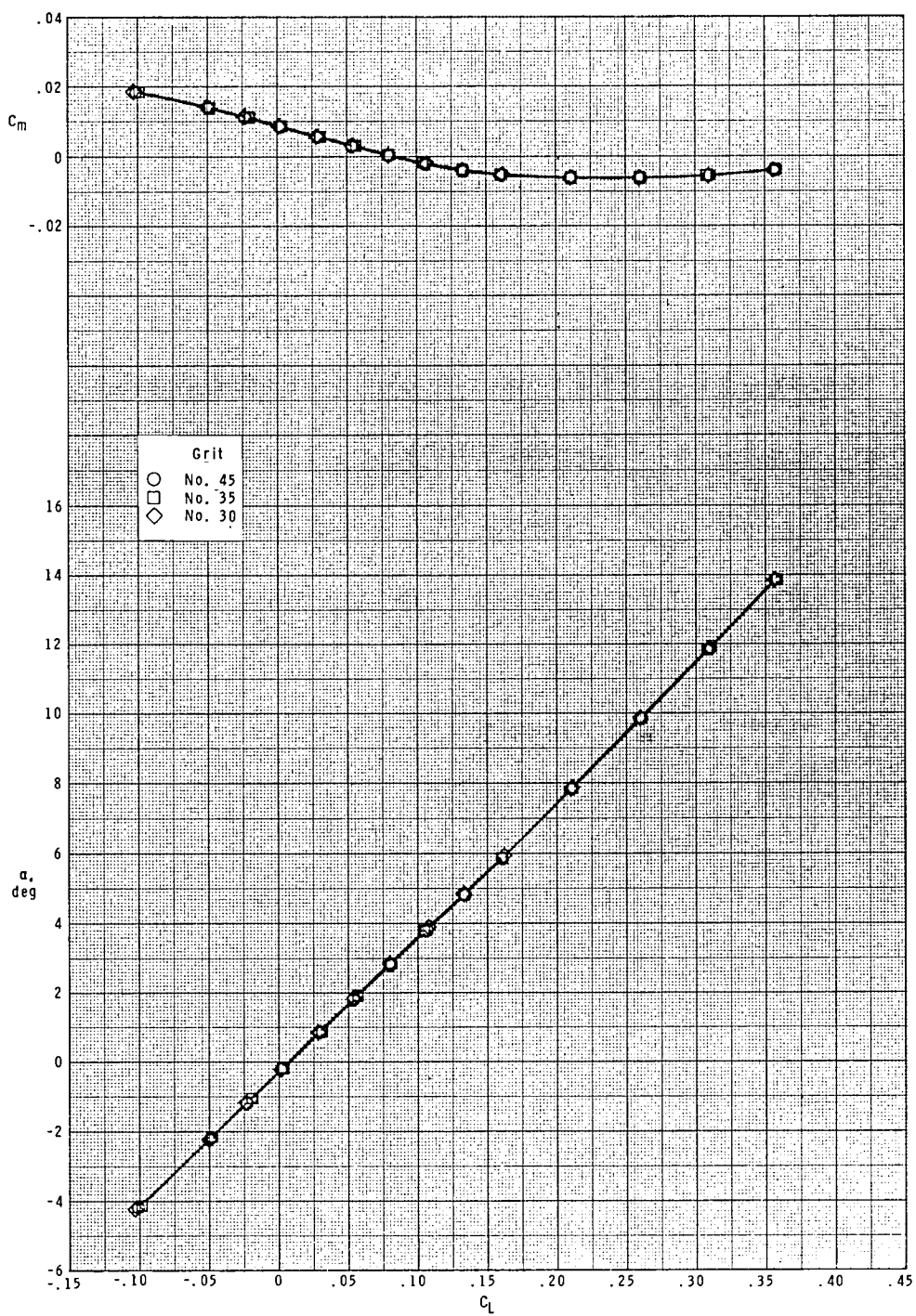
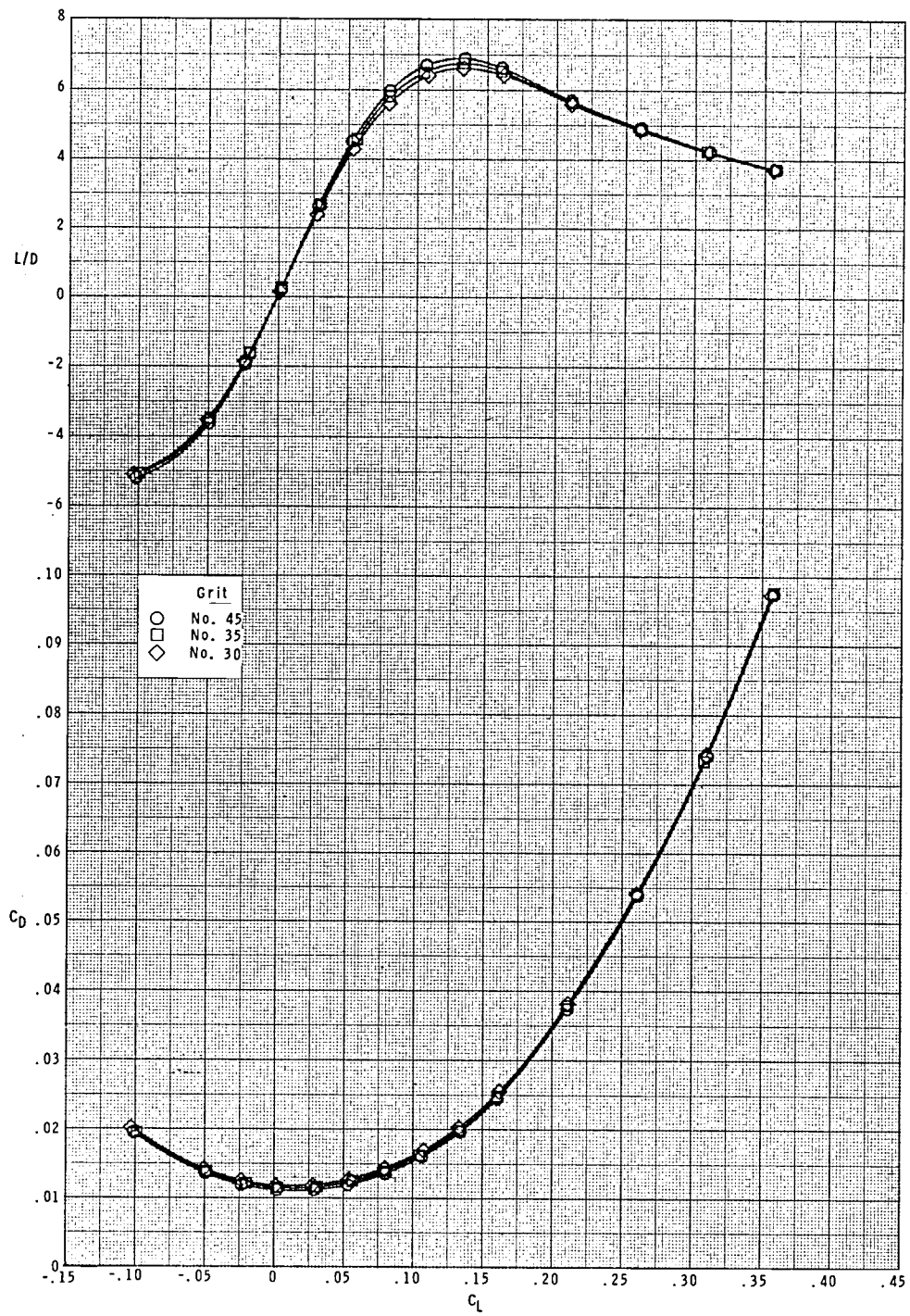


Figure 8.- Variation of some longitudinal parameters with Mach number for WBNV₁C.



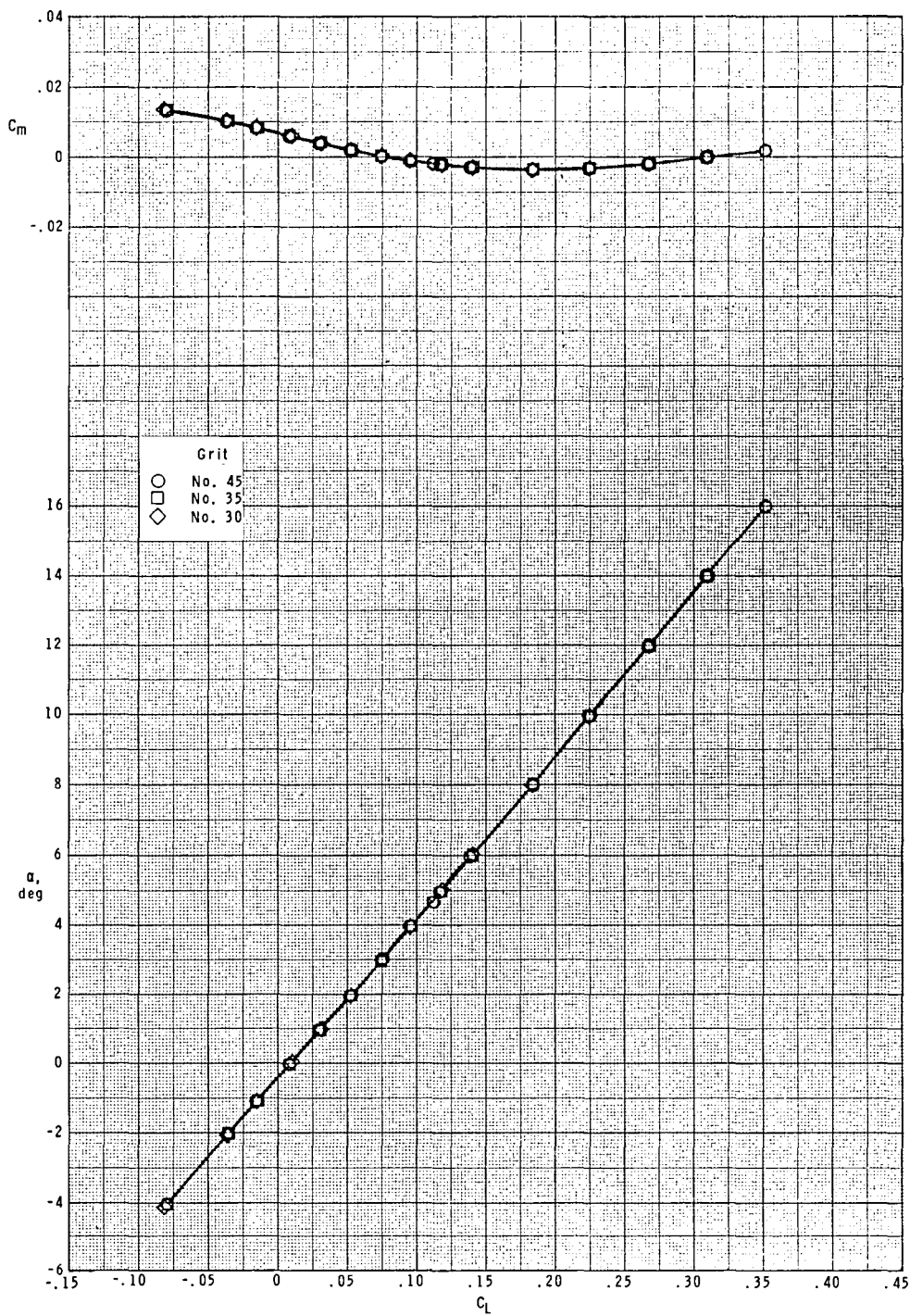
(a) $M = 2.30$.

Figure 9.- Variation of longitudinal aerodynamic characteristics with transition strip grit size.



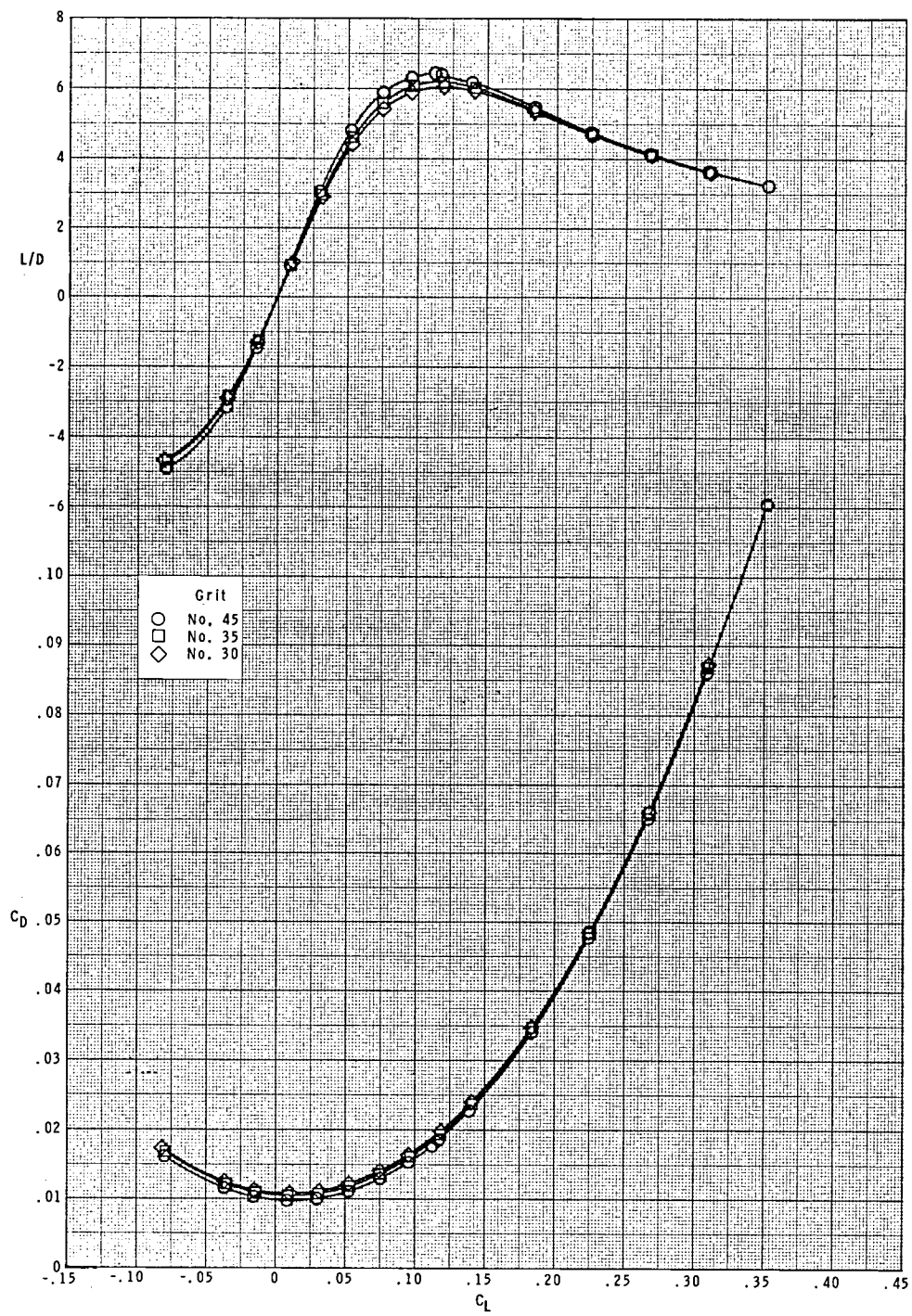
(a) Concluded.

Figure 9.- Continued.



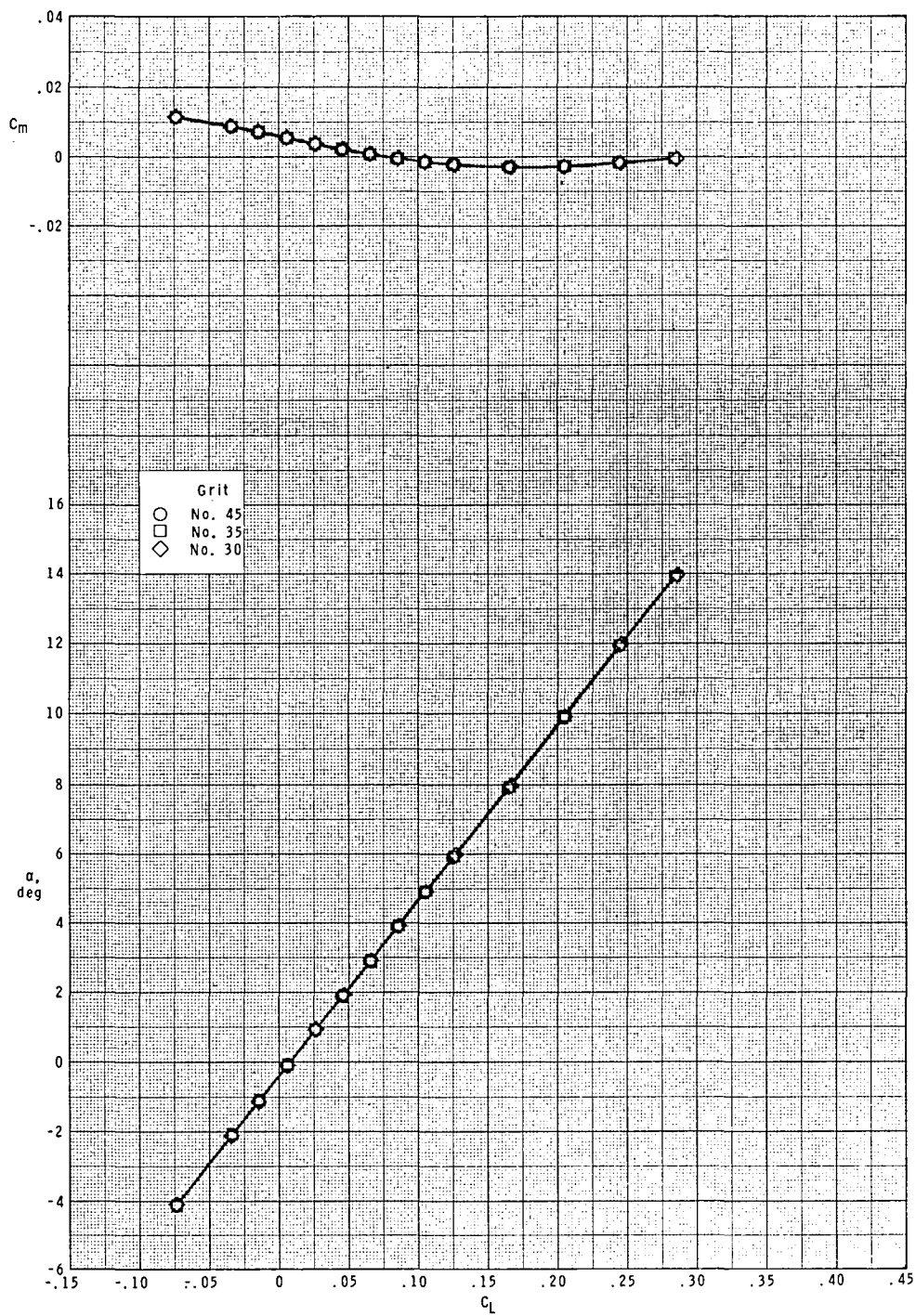
(b) $M = 2.96$.

Figure 9.- Continued.



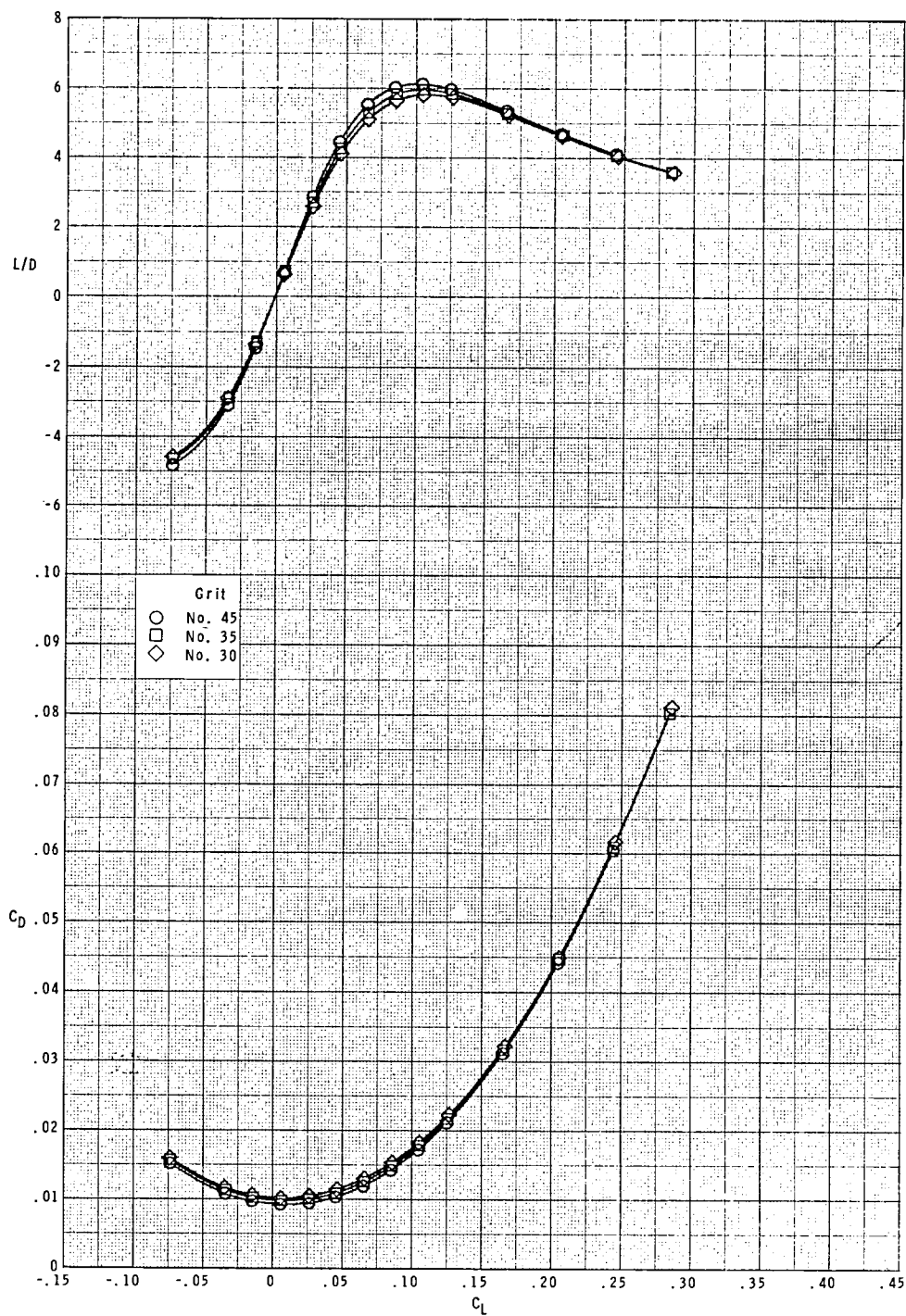
(b) Concluded.

Figure 9.- Continued.



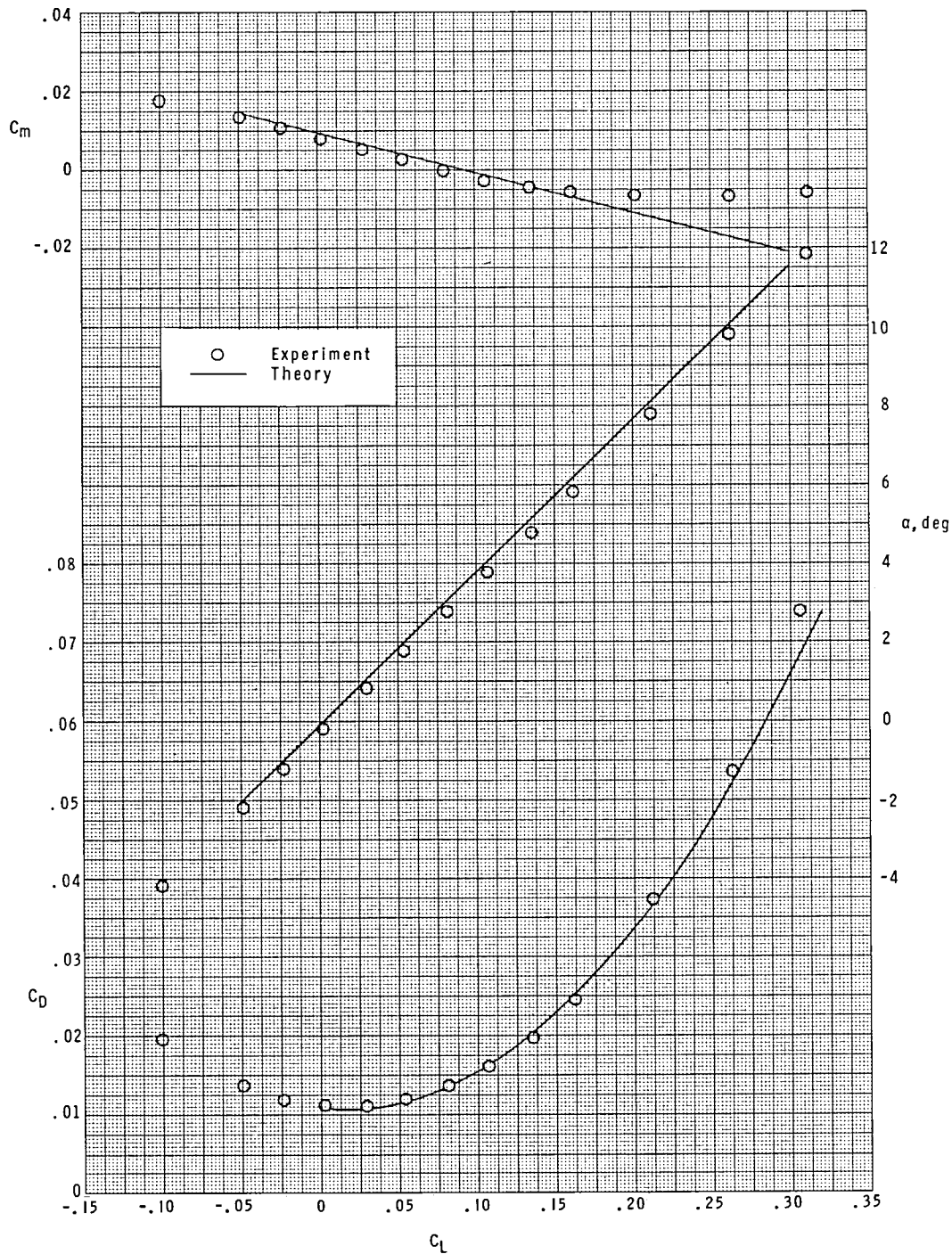
(c) $M = 3.30$.

Figure 9.- Continued.



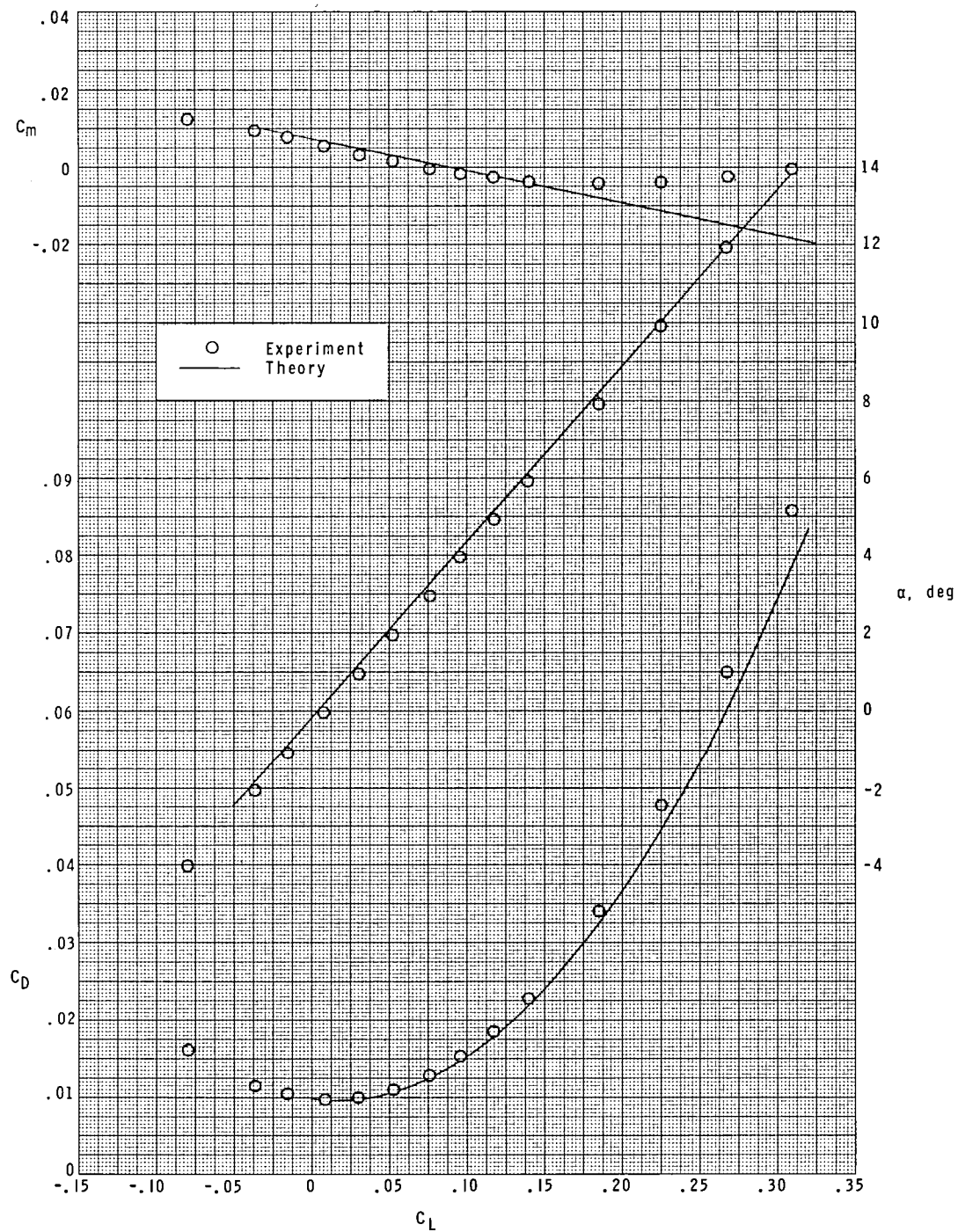
(c) Concluded.

Figure 9.- Concluded.



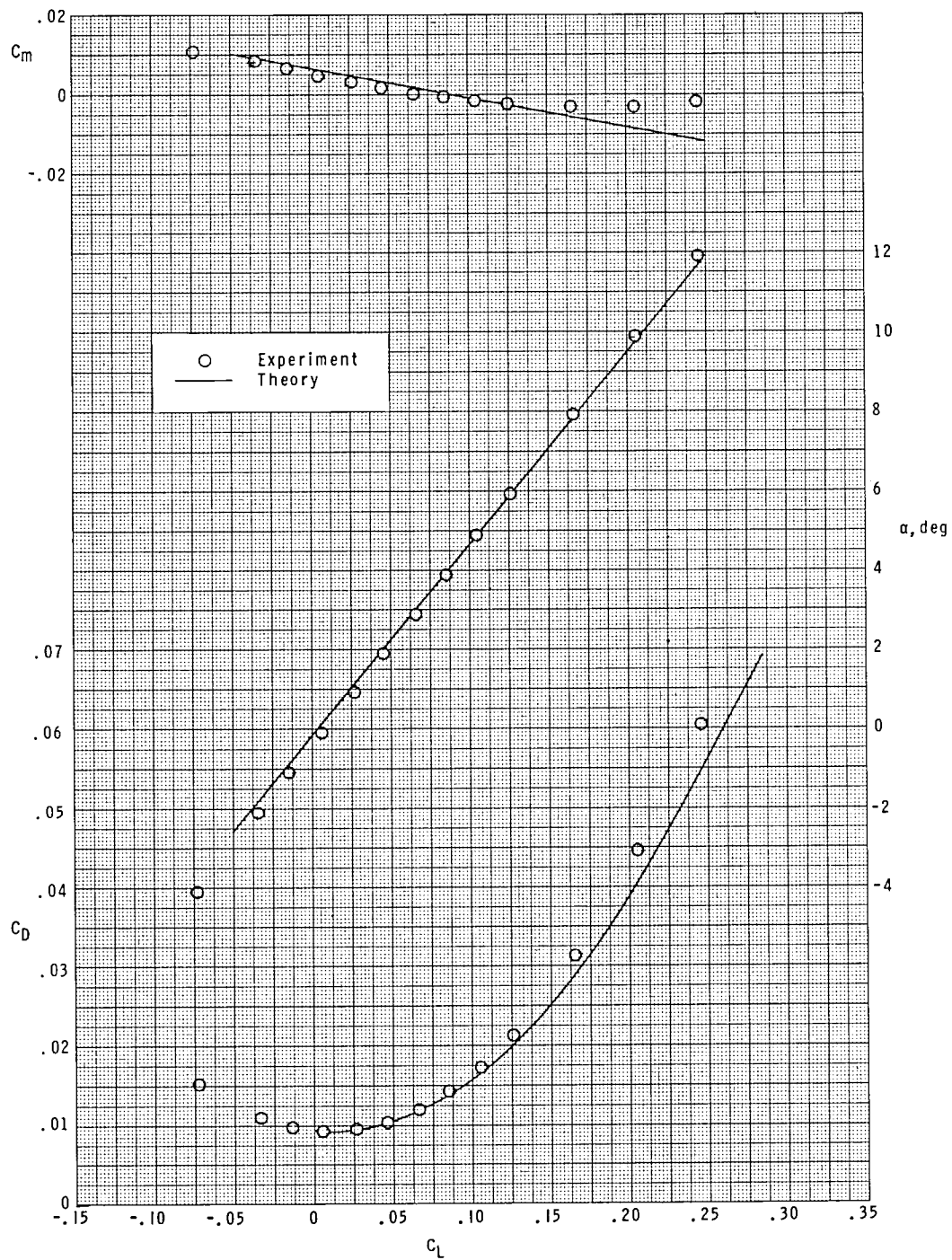
(a) $M = 2.30$.

Figure 10.- Comparison of theory and experiment for baseline configuration.



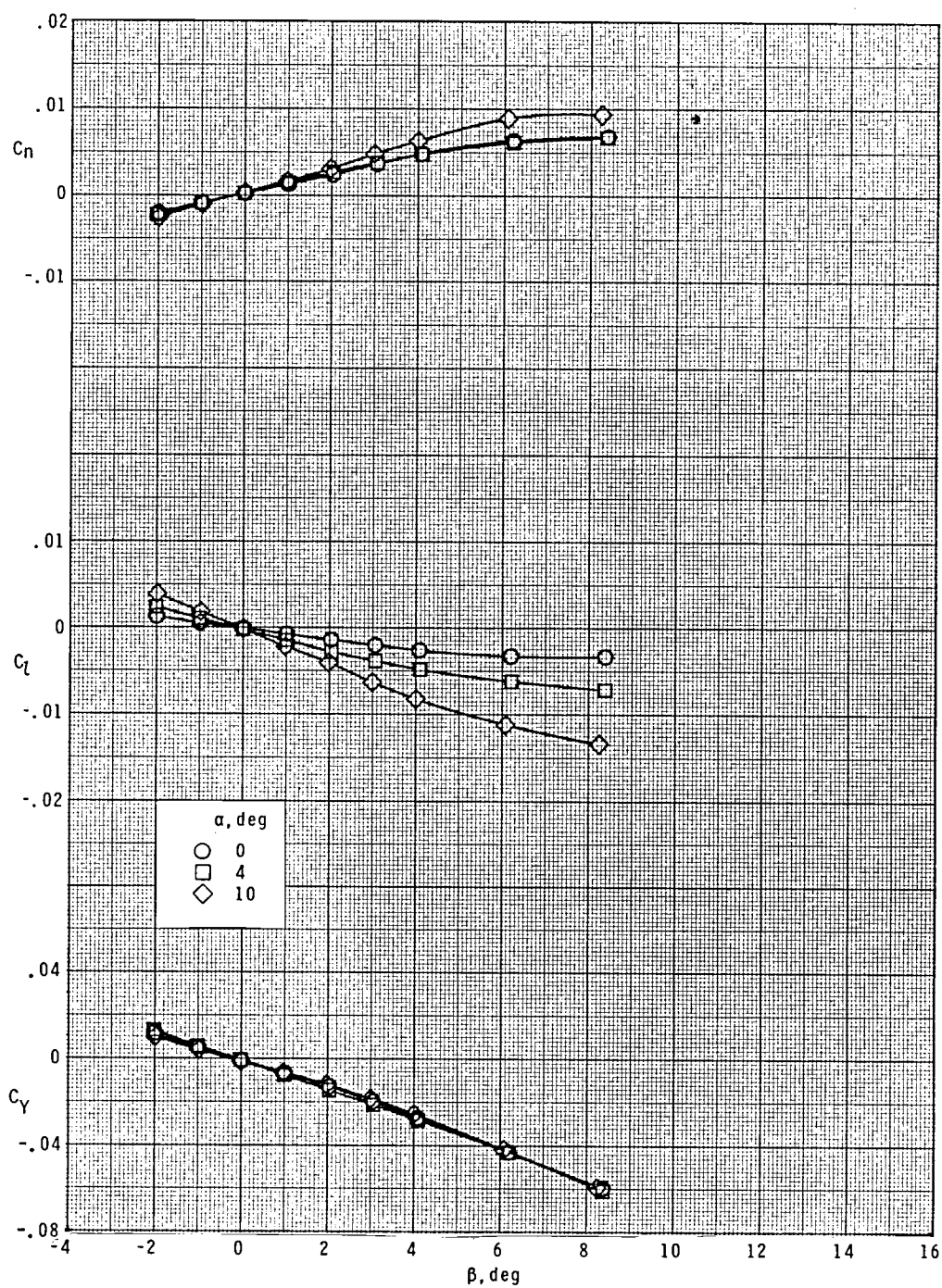
(b) $M = 2.96$.

Figure 10.- Continued.



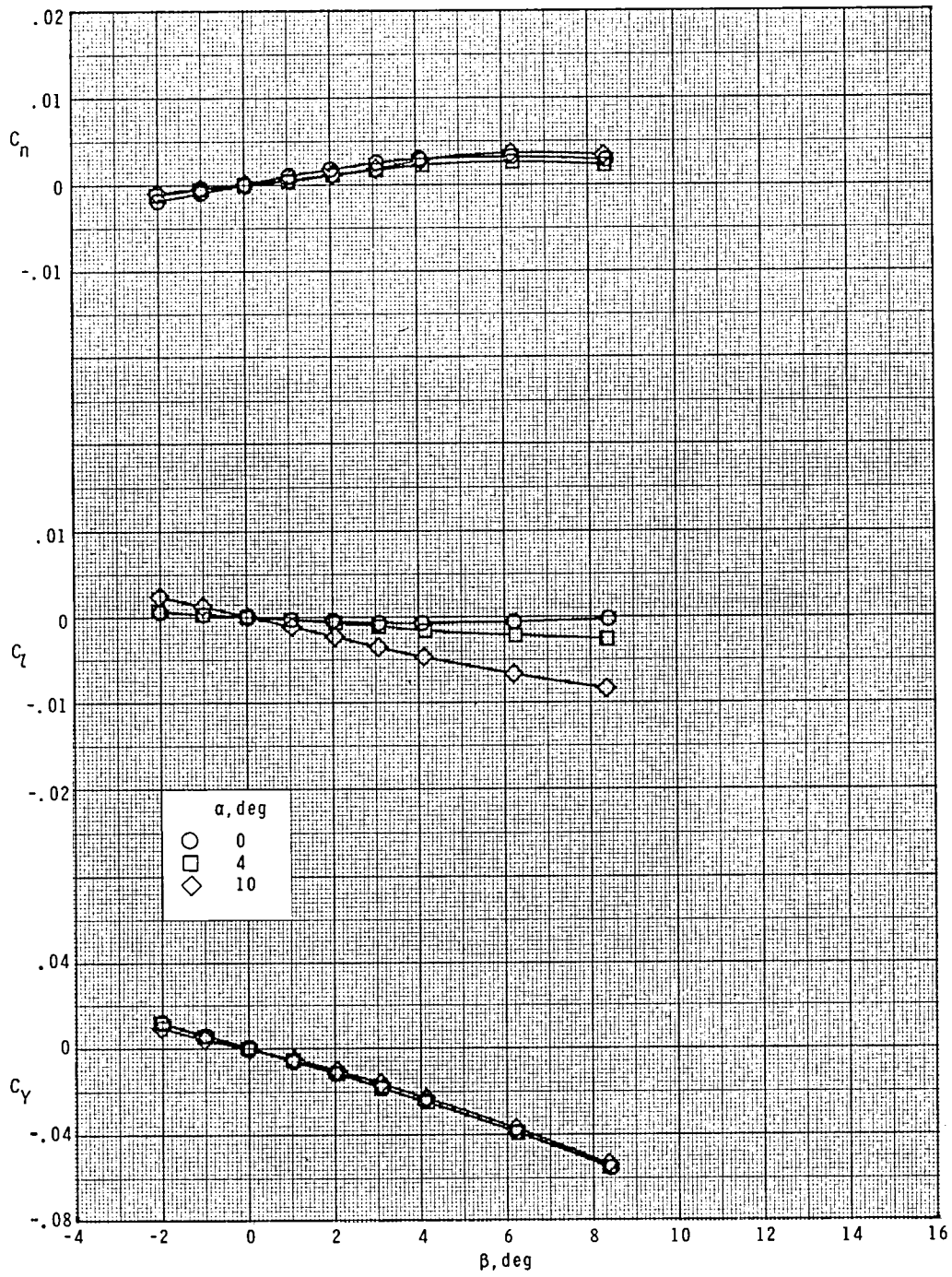
(c) $M = 3.30$.

Figure 10.- Concluded.



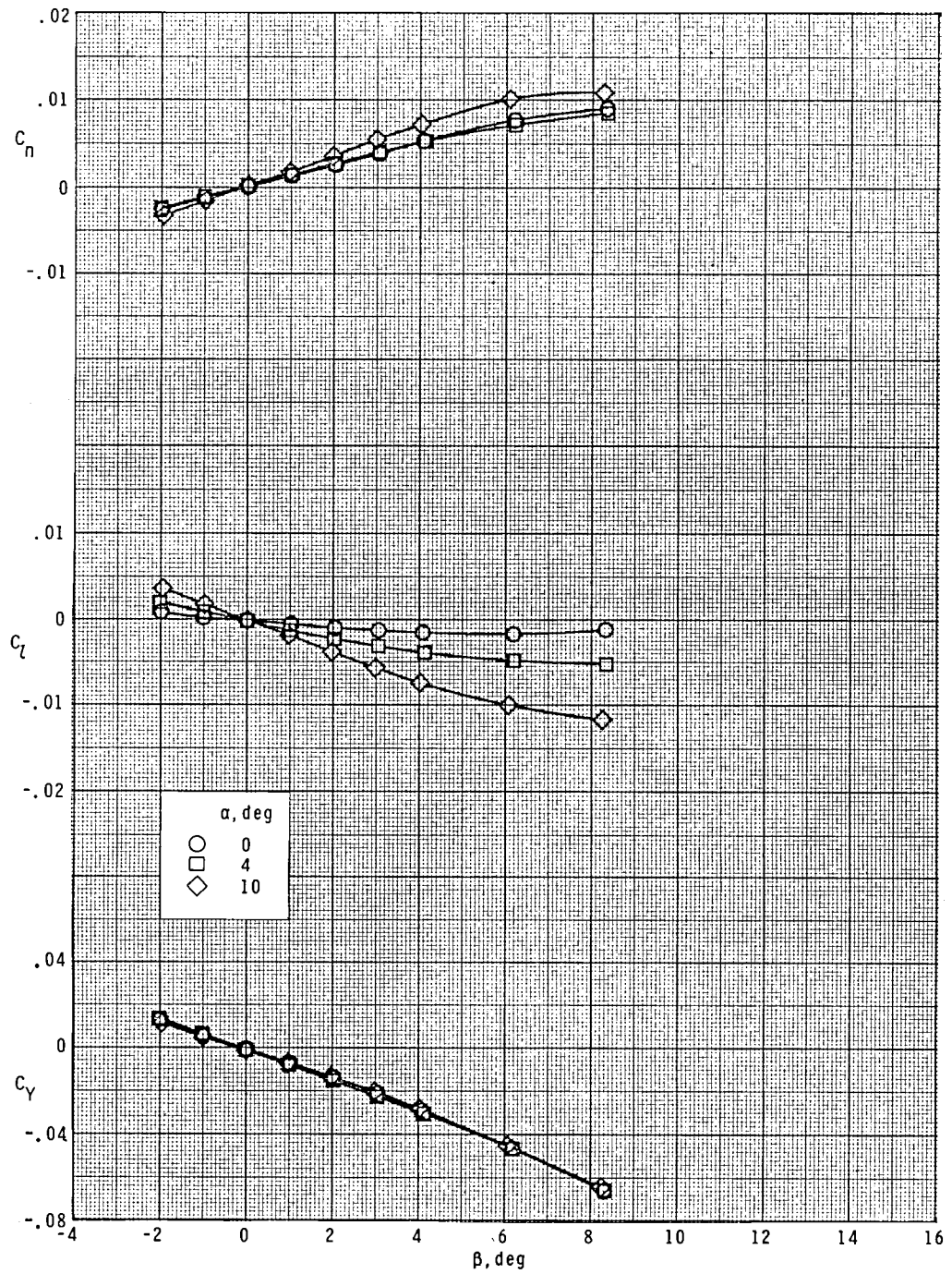
(a) $M = 2.30$.

Figure 11.- Variation of lateral-directional aerodynamic characteristics with sideslip angle for configuration with 70° vertical tail (WBNV₁C) for $\delta_V = 2.25^\circ$.



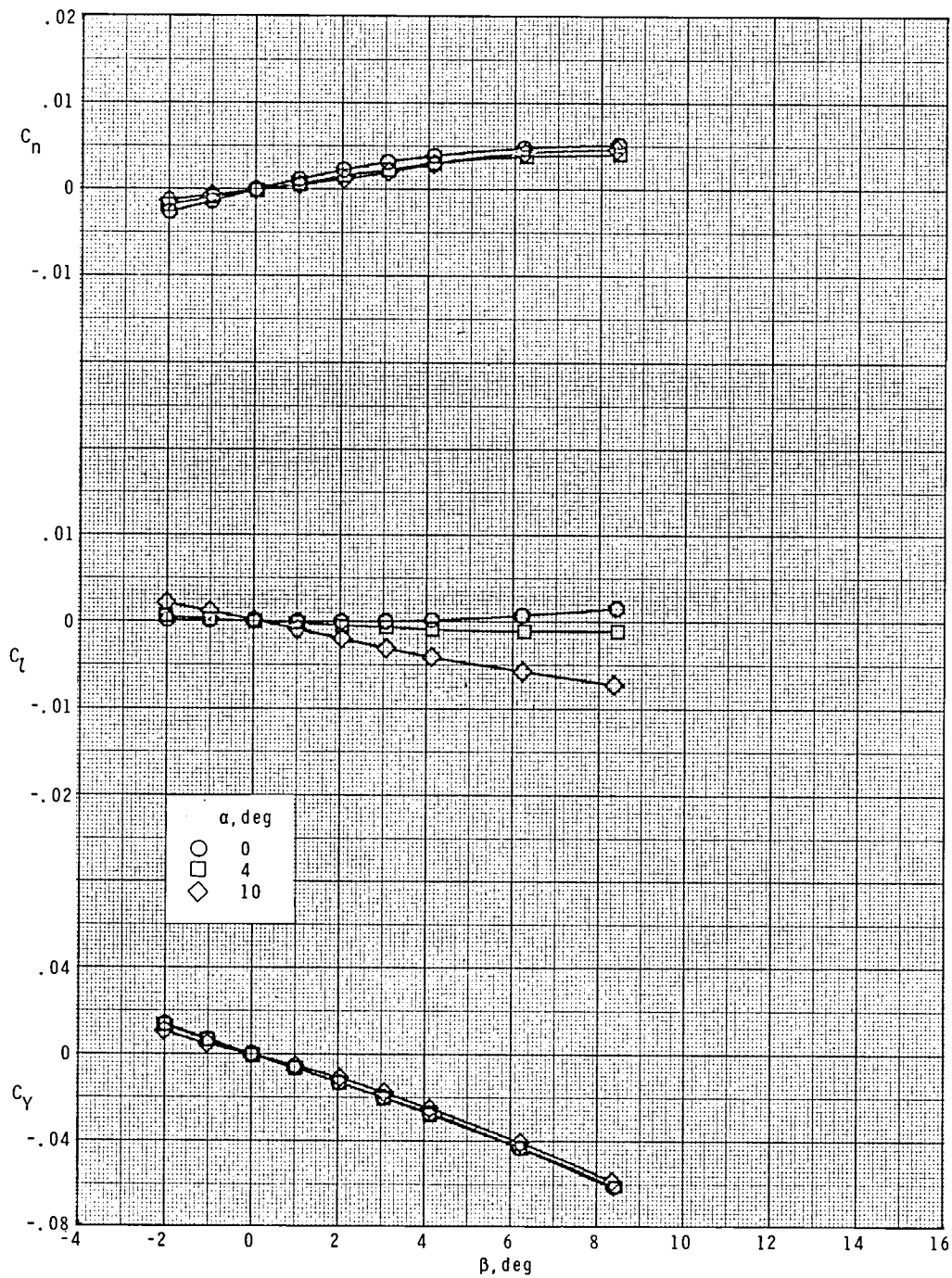
(b) $M = 2.96$.

Figure 11.- Concluded.

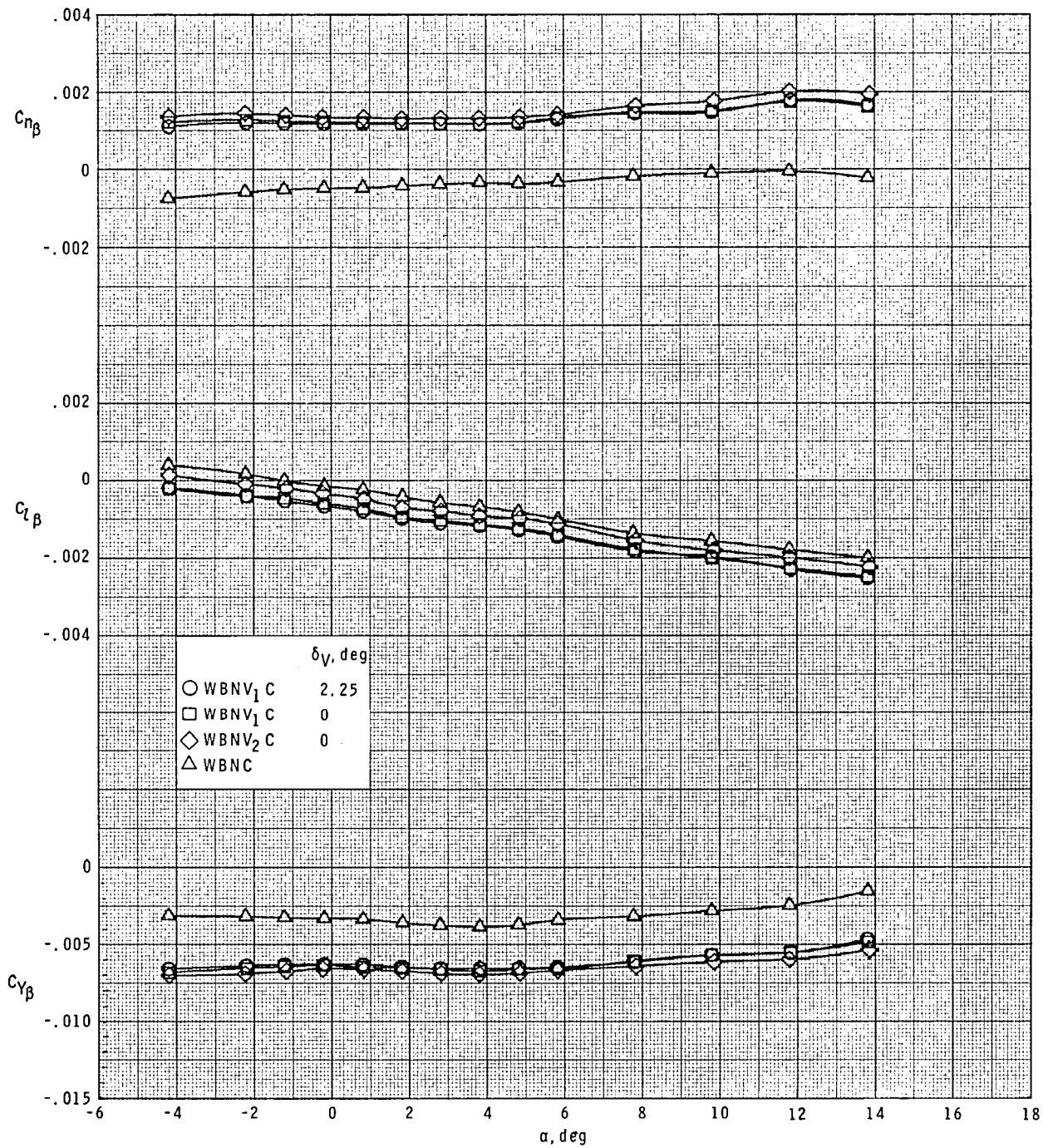


(a) $M = 2.30$.

Figure 12.- Variation of lateral-directional aerodynamic characteristics with sideslip angle for configuration with 90° vertical tail and ventral fin (WBNV₂CF_V).

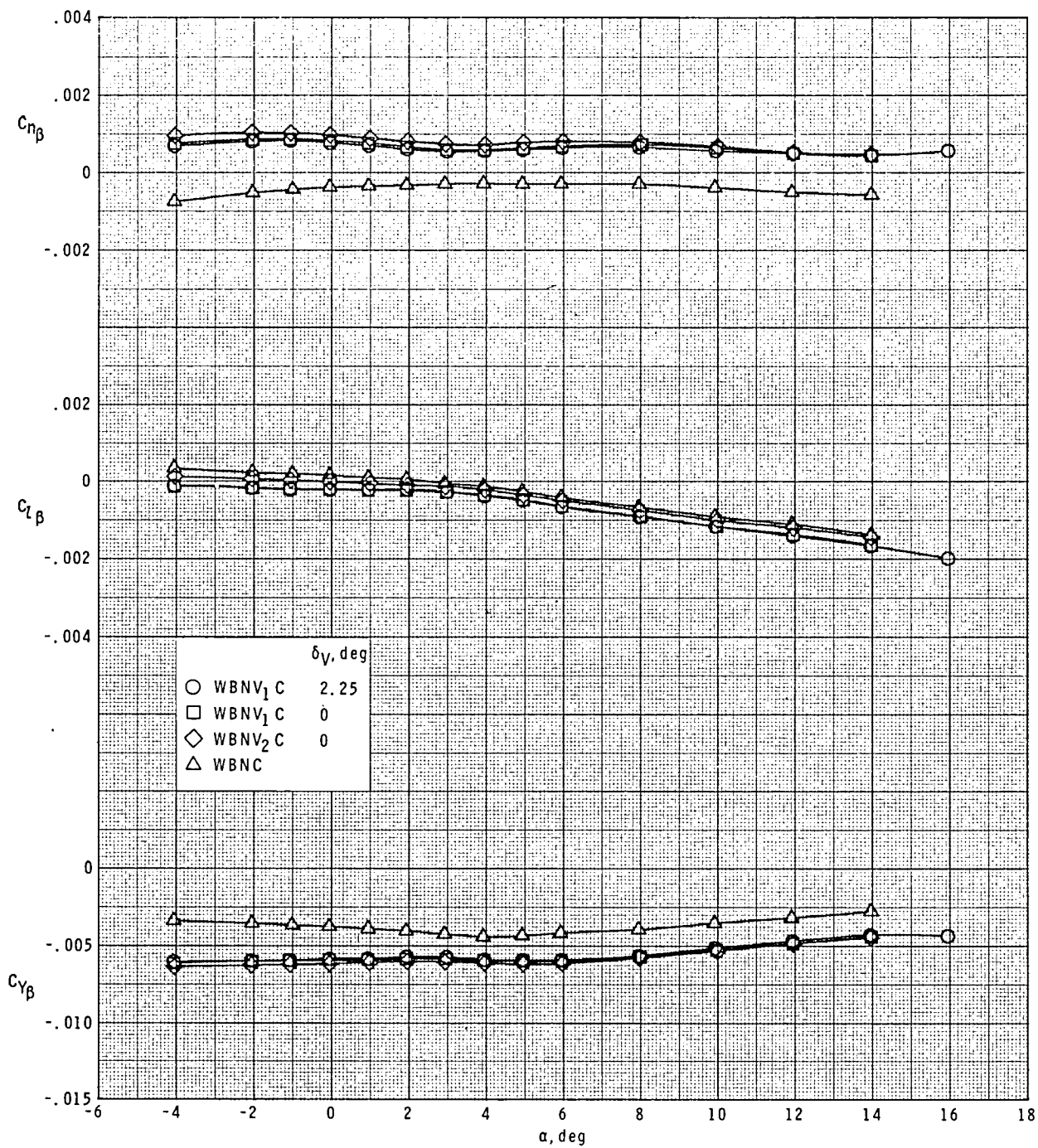


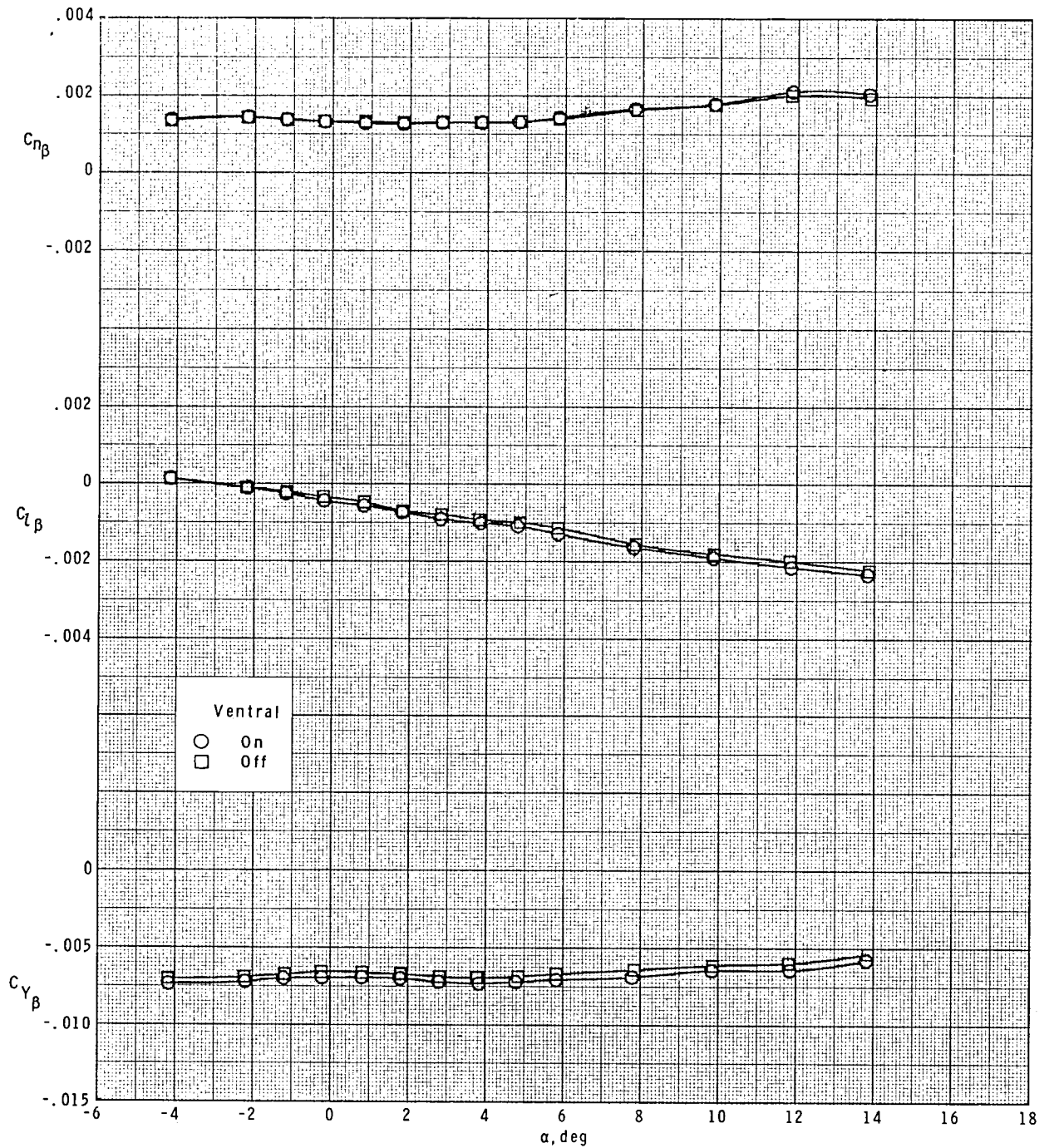
(b) $M = 2.96$.
Figure 12.- Concluded.



(a) $M = 2.30$.

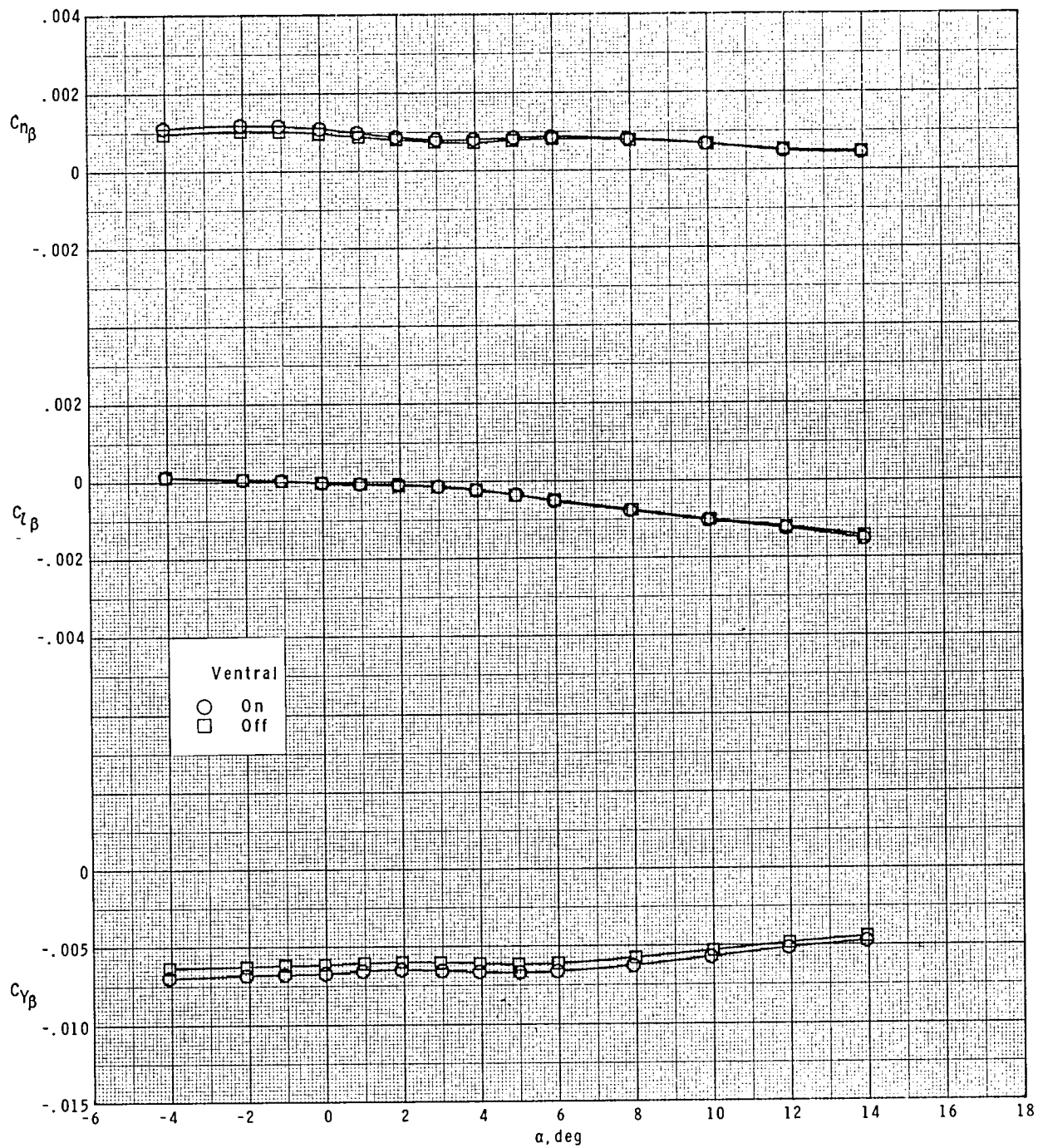
Figure 13.- Effect of vertical tail orientation on variation of sideslip derivatives with angle of attack.



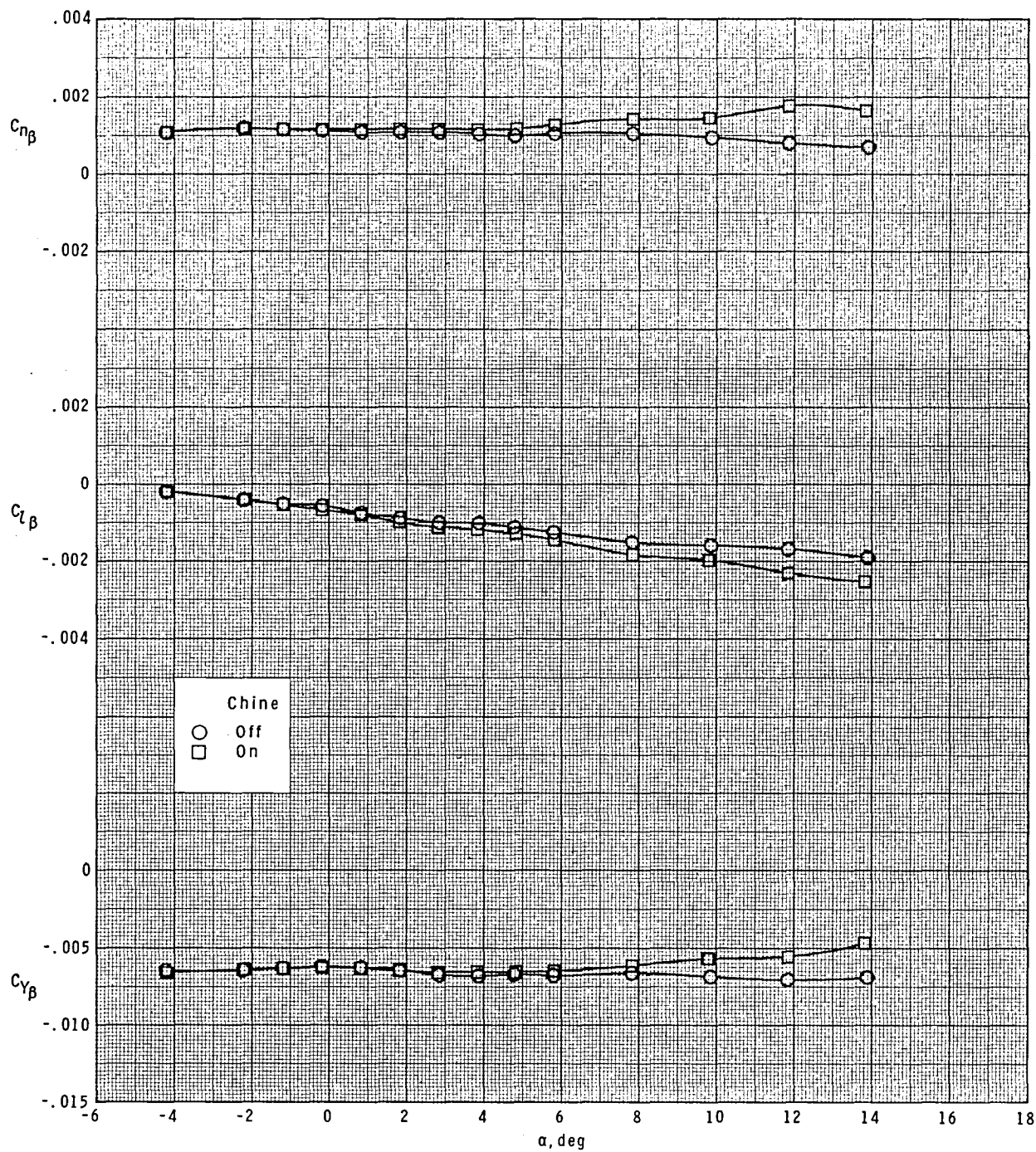


(a) $M = 2.30$.

Figure 14.- Effect of ventral fin on variation of sideslip derivatives with angle of attack.

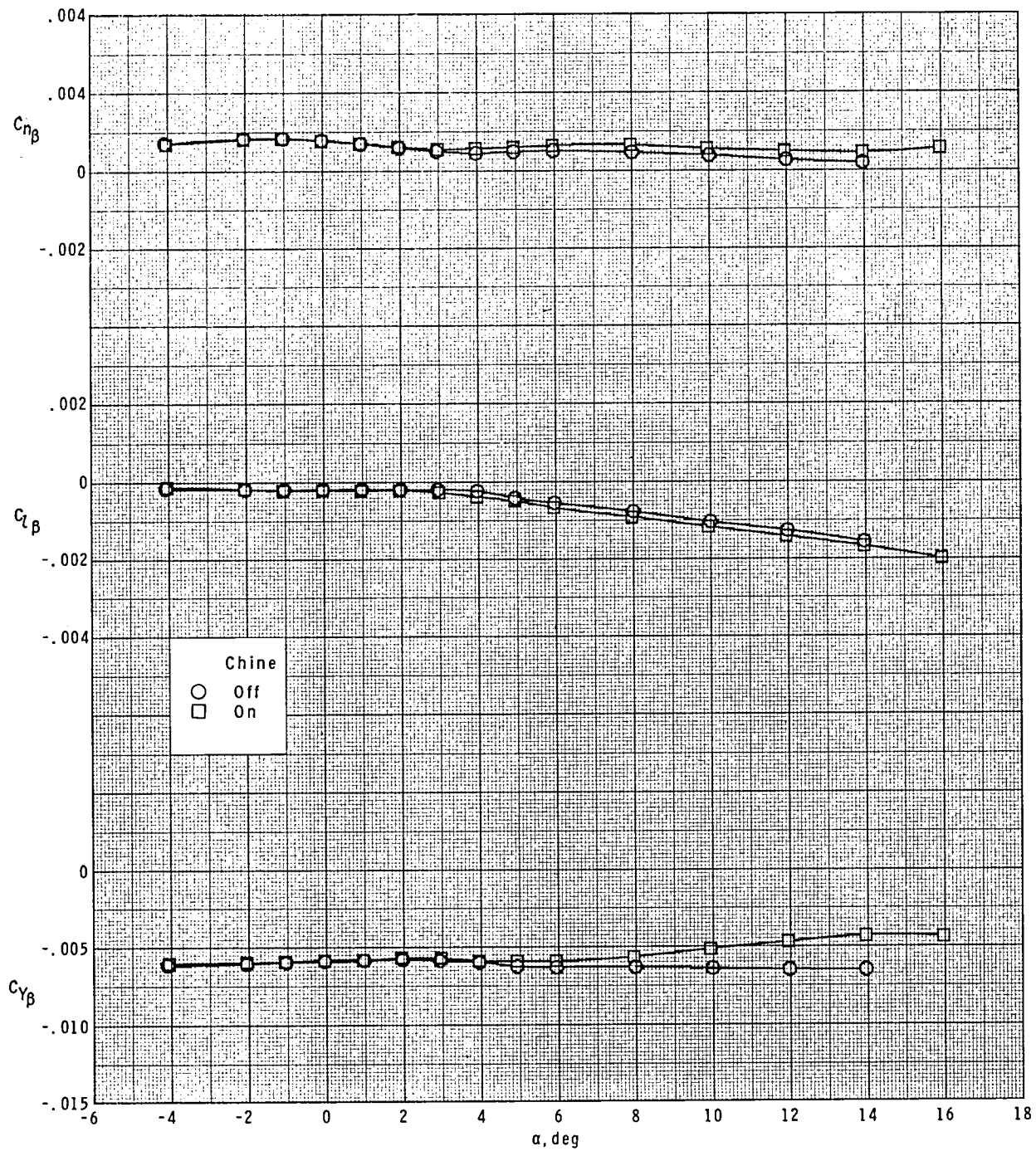


(b) $M = 2.96$.
Figure 14.- Concluded.



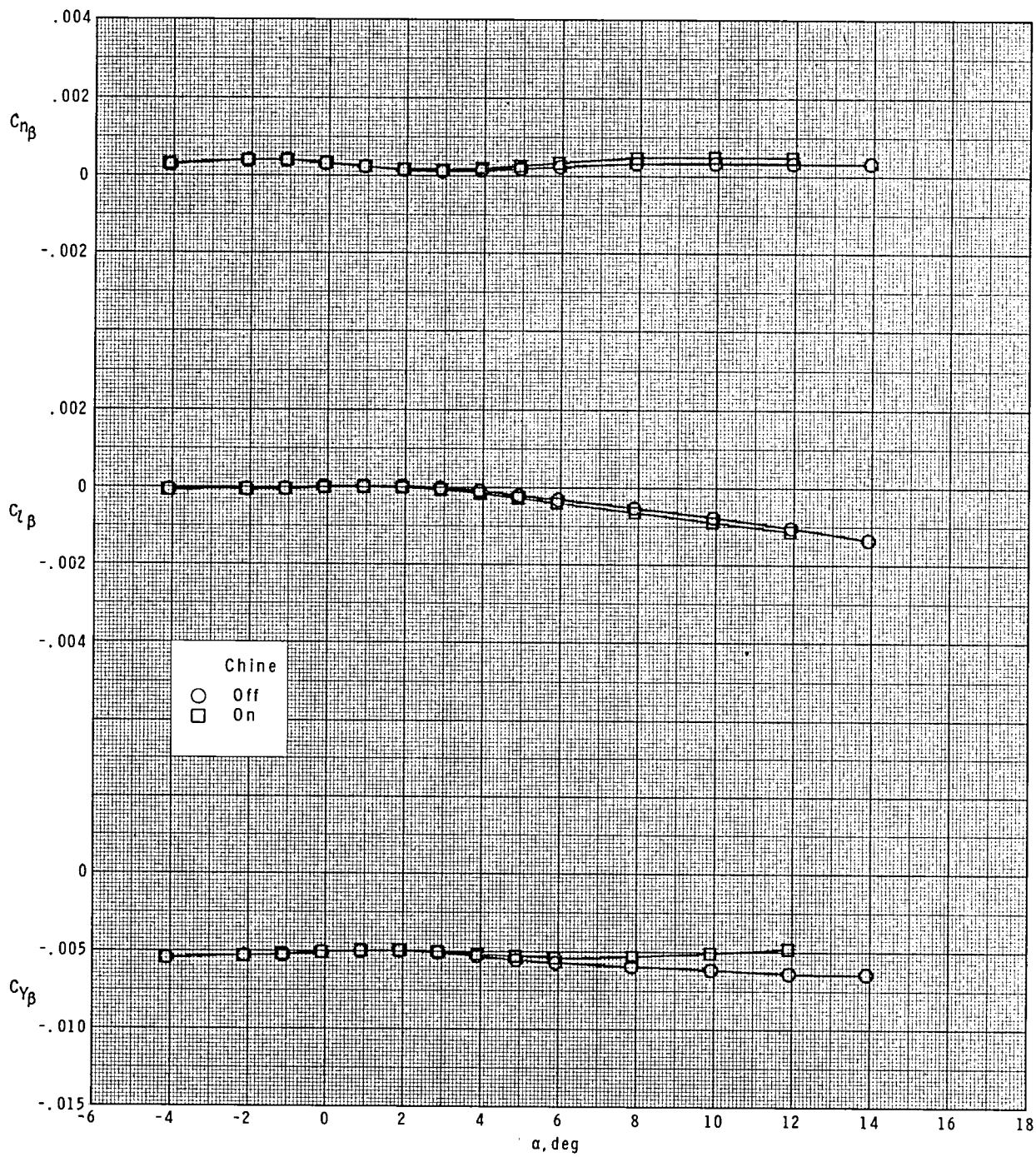
(a) $M = 2.30$.

Figure 15.- Effect of chine on variation of sideslip derivatives with angle of attack.



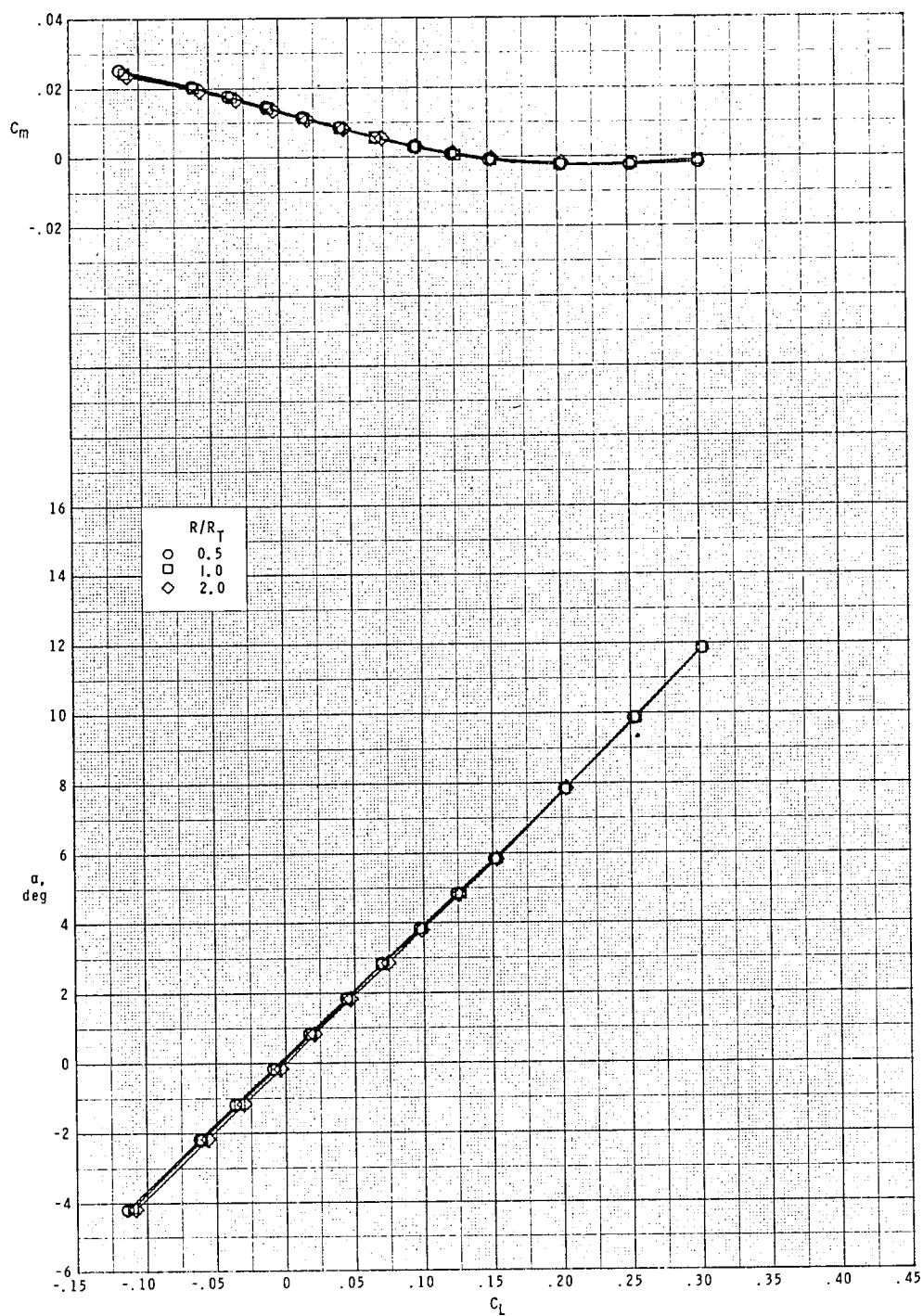
(b) $M = 2.96$.

Figure 15.- Continued.



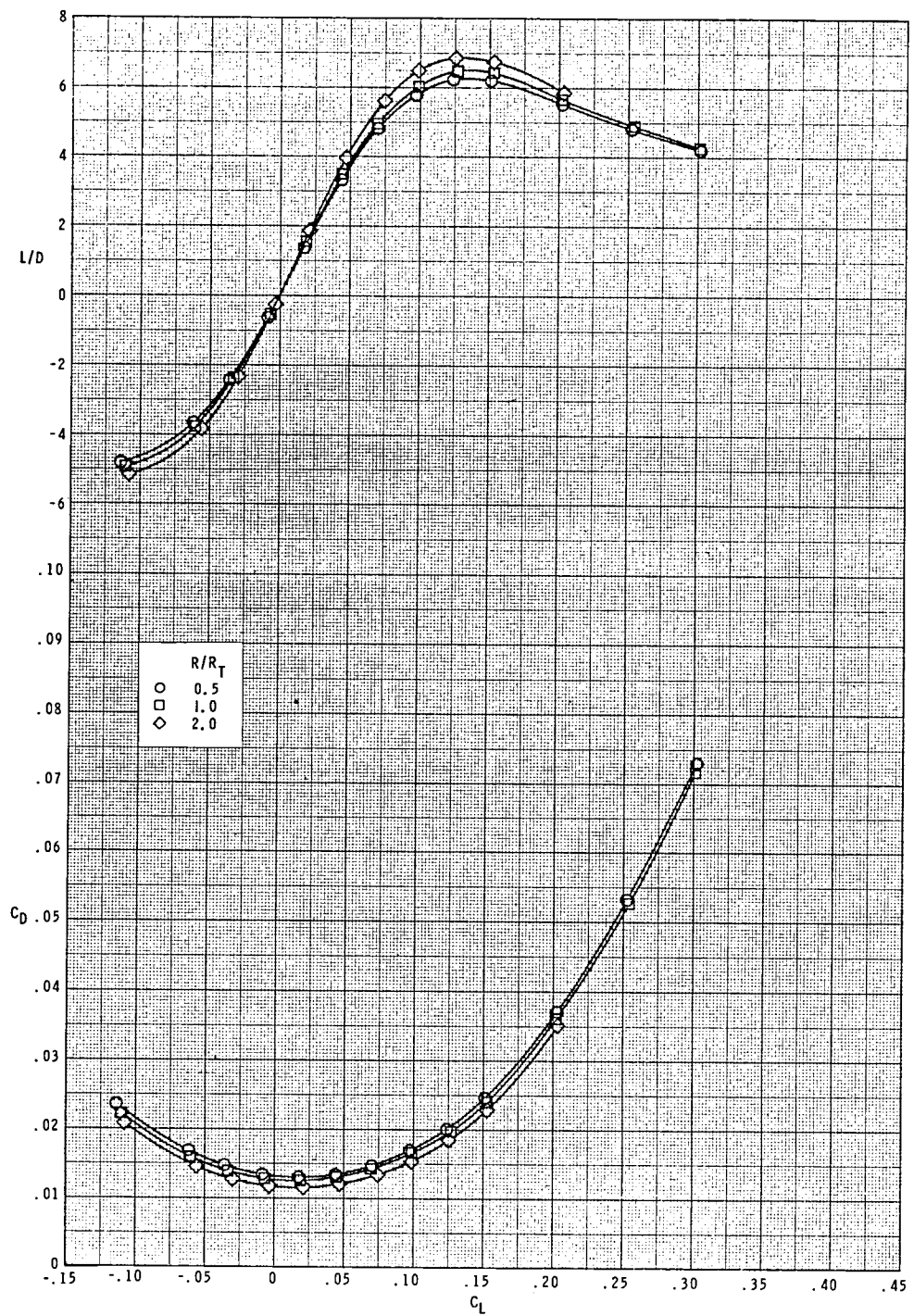
(c) $M = 3.30$.

Figure 15.- Concluded.



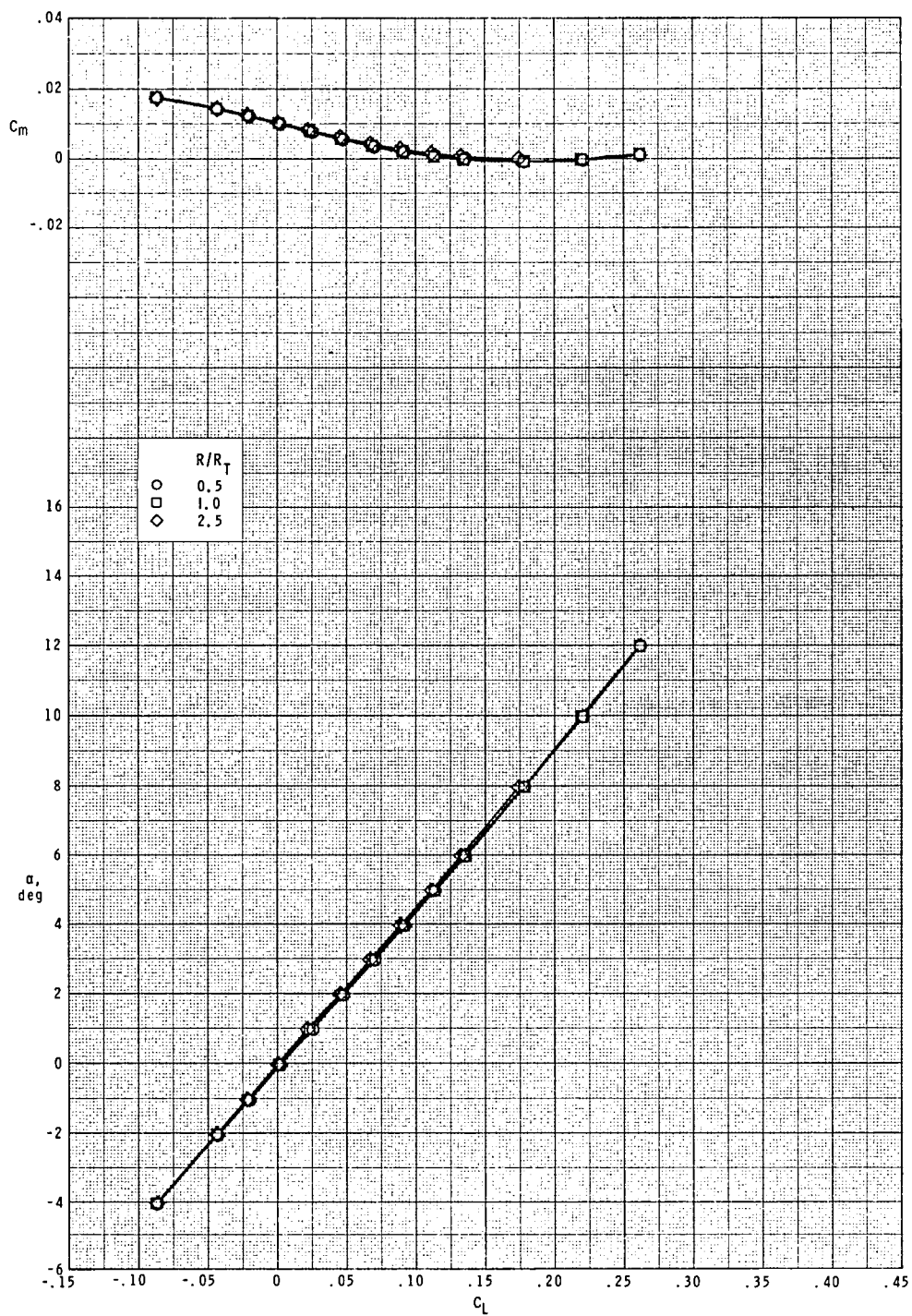
(a) $M = 2.30$.

Figure 16.- Effect of Reynolds number on longitudinal aerodynamic characteristics of model ($\delta_{e,L} = \delta_{e,R} = -11.5^\circ$).



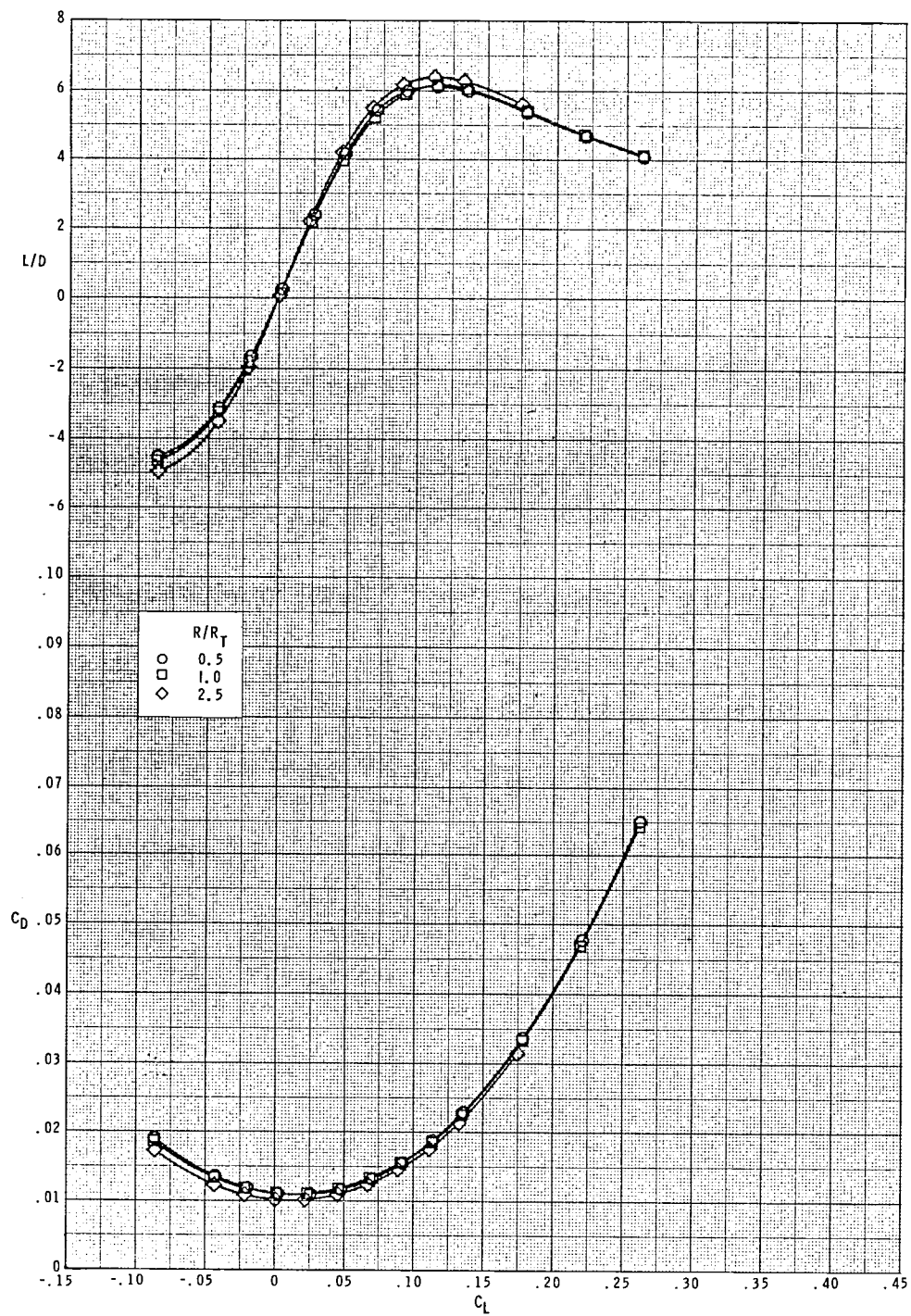
(a) Concluded.

Figure 16.- Continued.



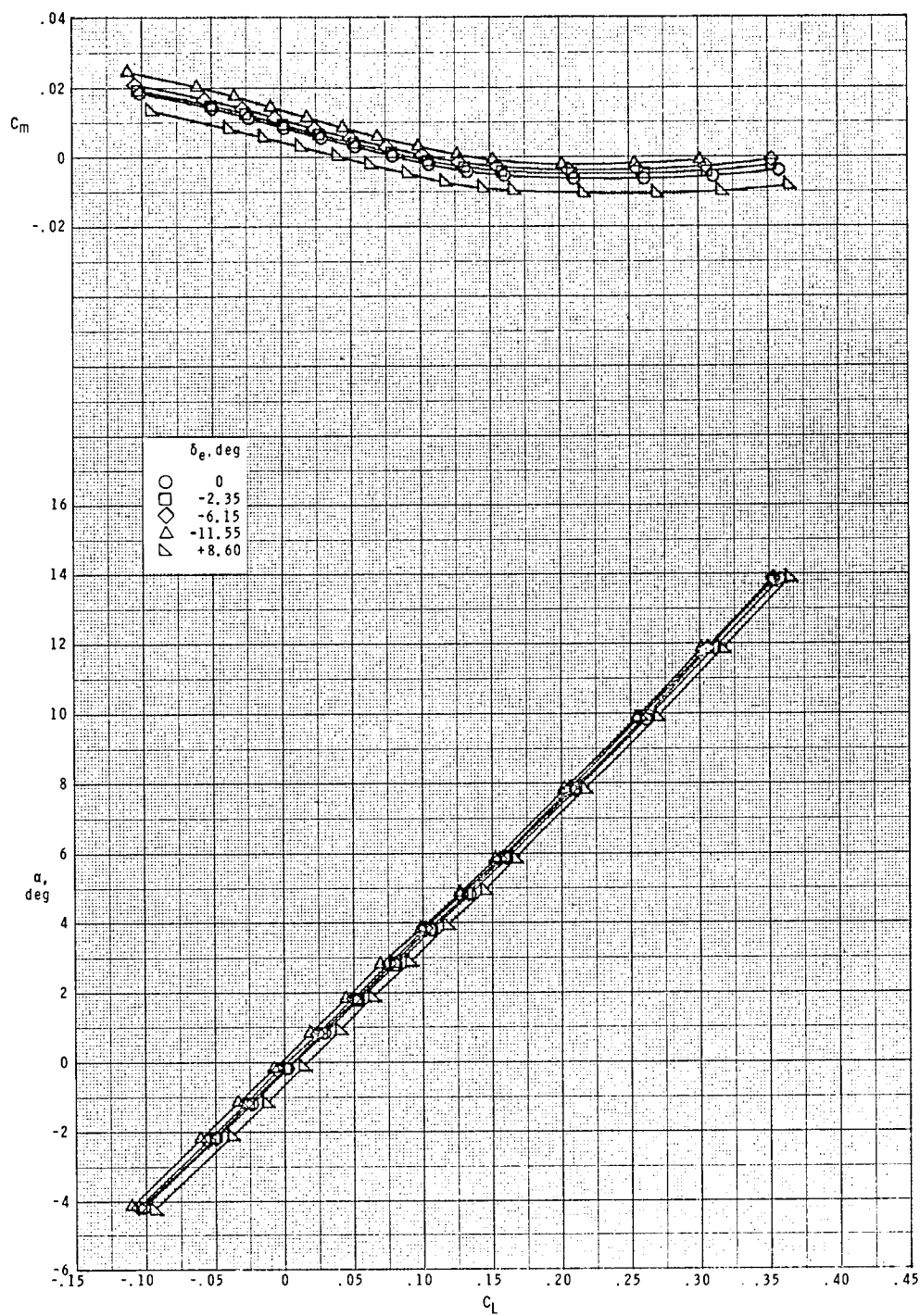
(b) $M = 2.96$.

Figure 16.- Continued.



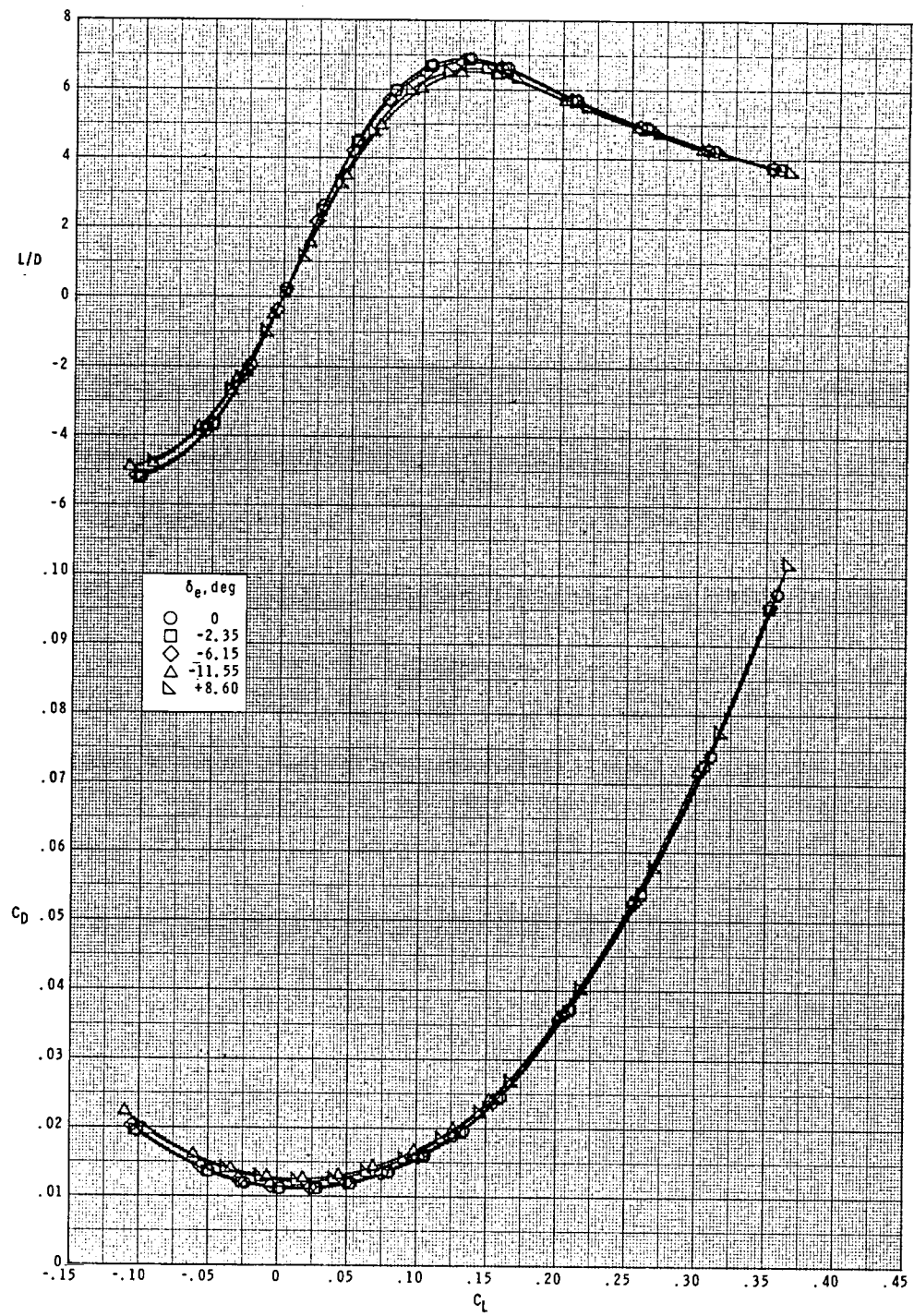
(b) Concluded.

Figure 16.- Concluded.



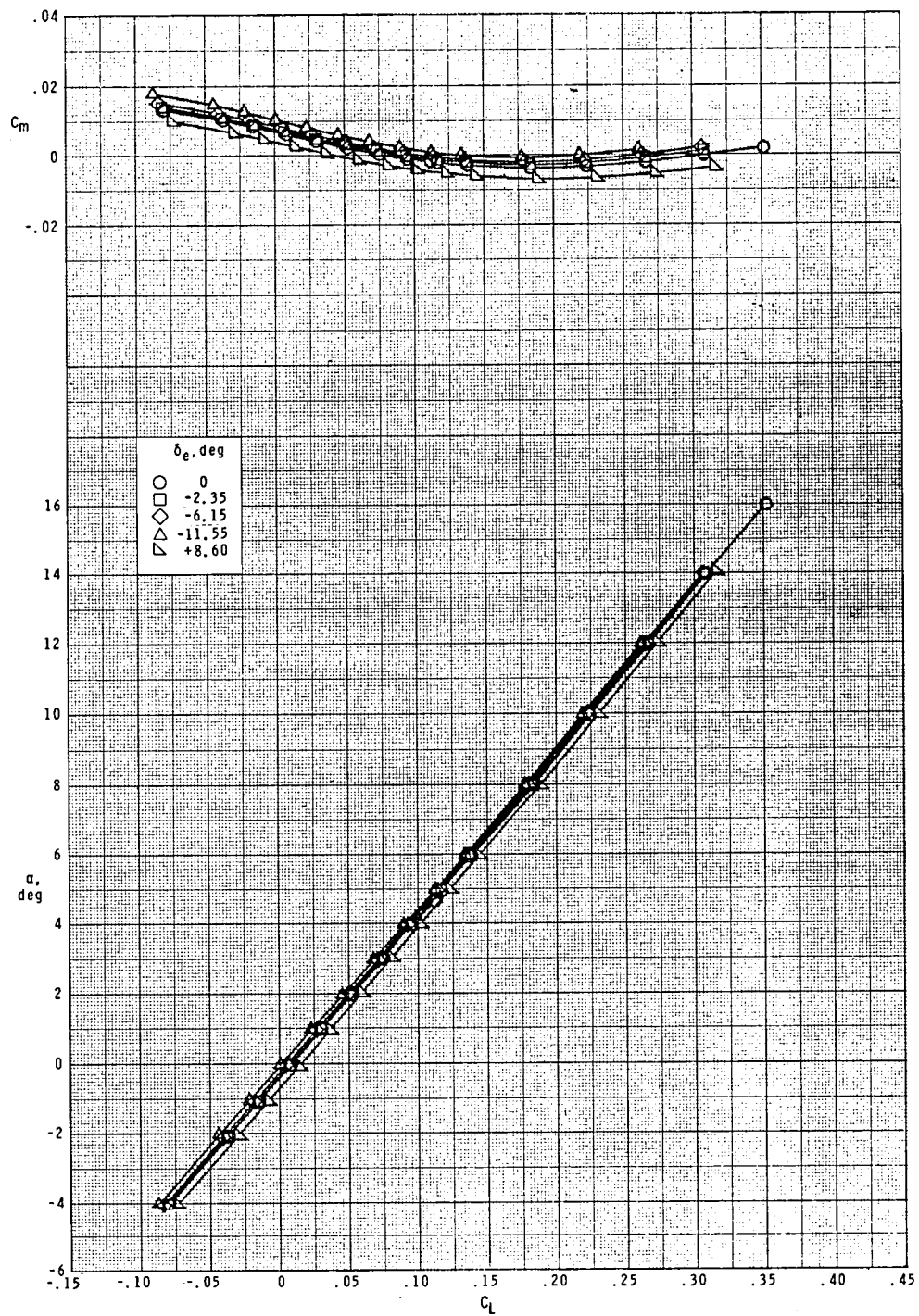
(a) $M = 2.30$.

Figure 17.- Effect of control deflections on longitudinal aerodynamic characteristics of model.



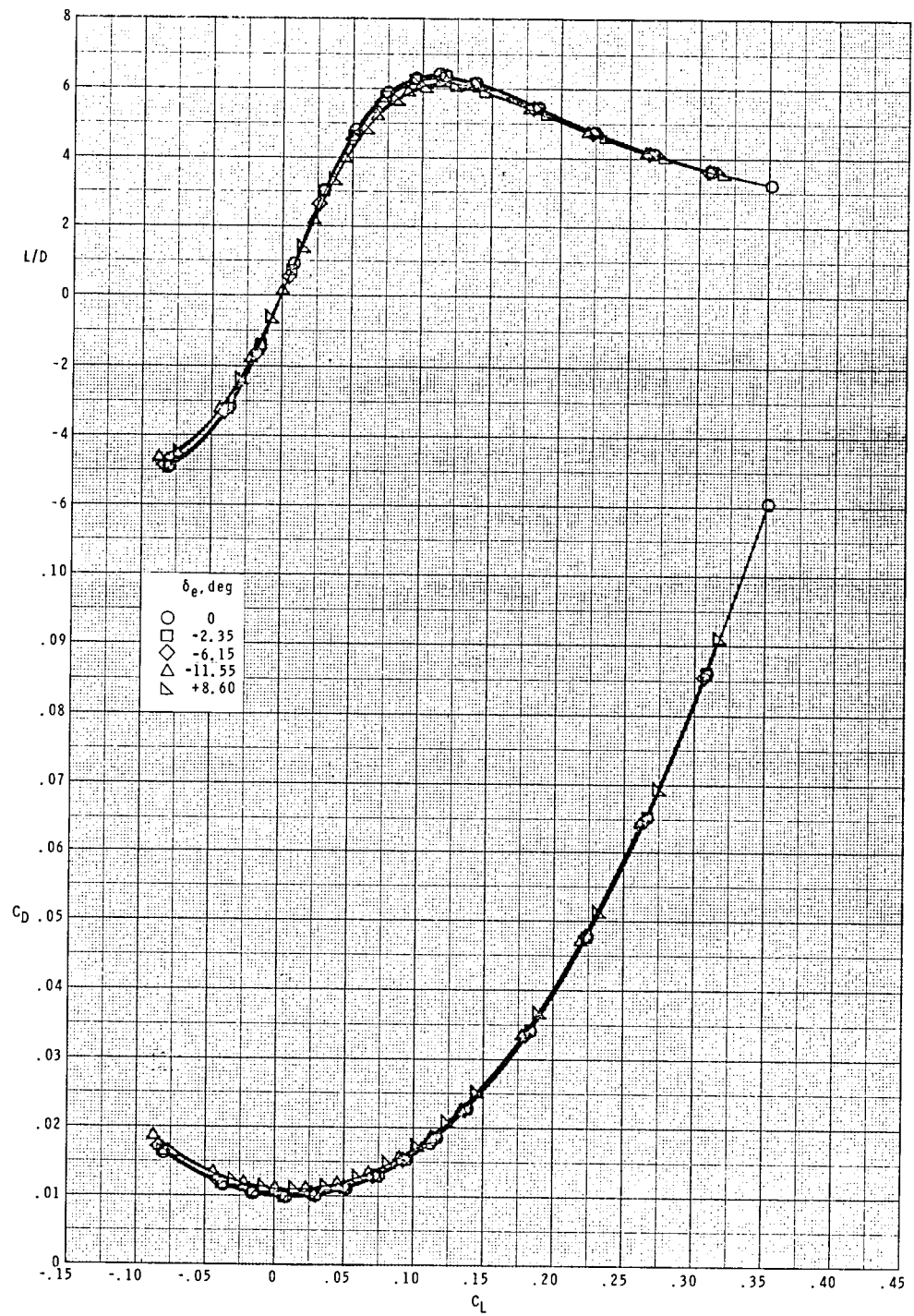
(a) Concluded.

Figure 17.- Continued.



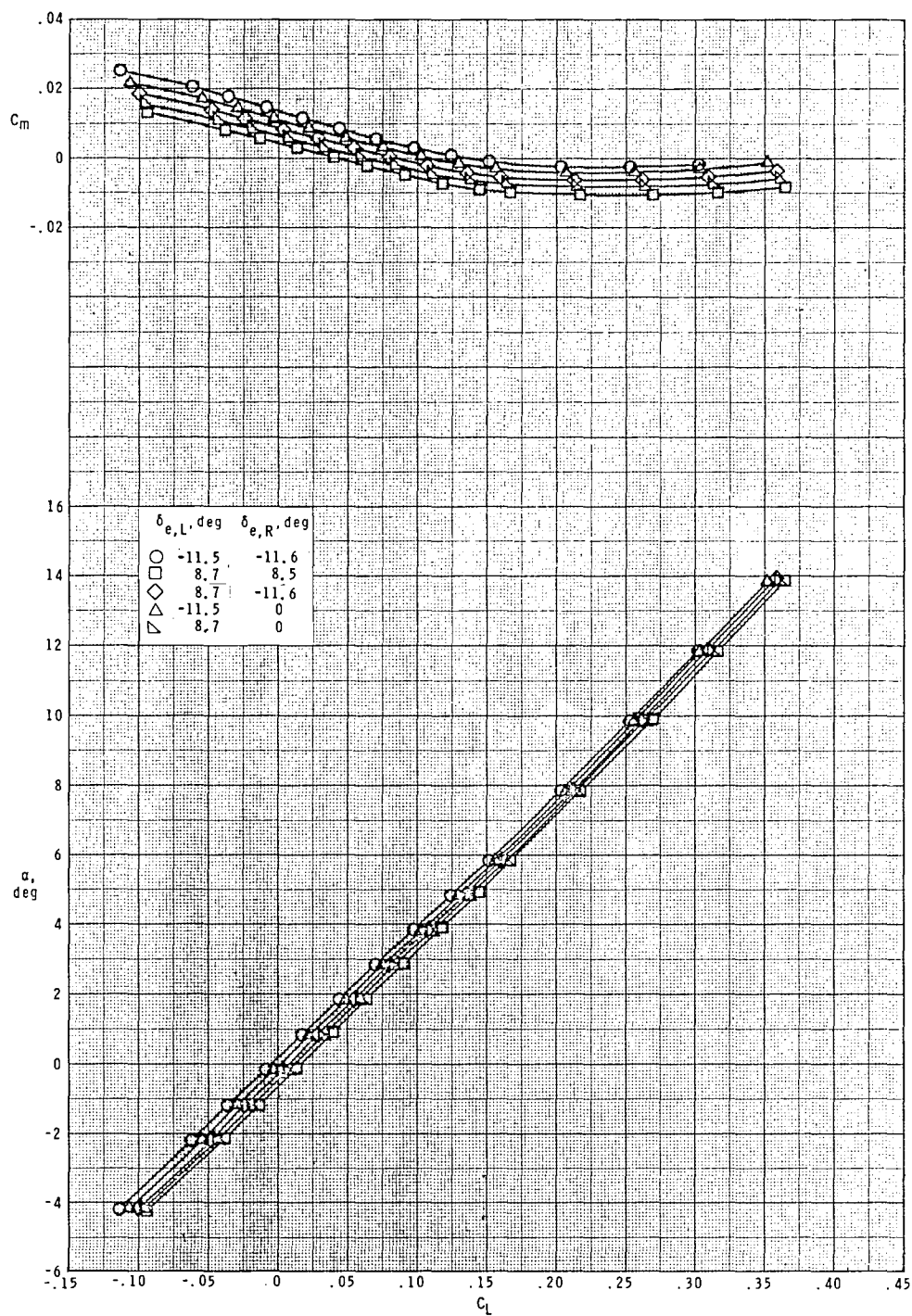
(b) $M = 2.96$.

Figure 17.- Continued.



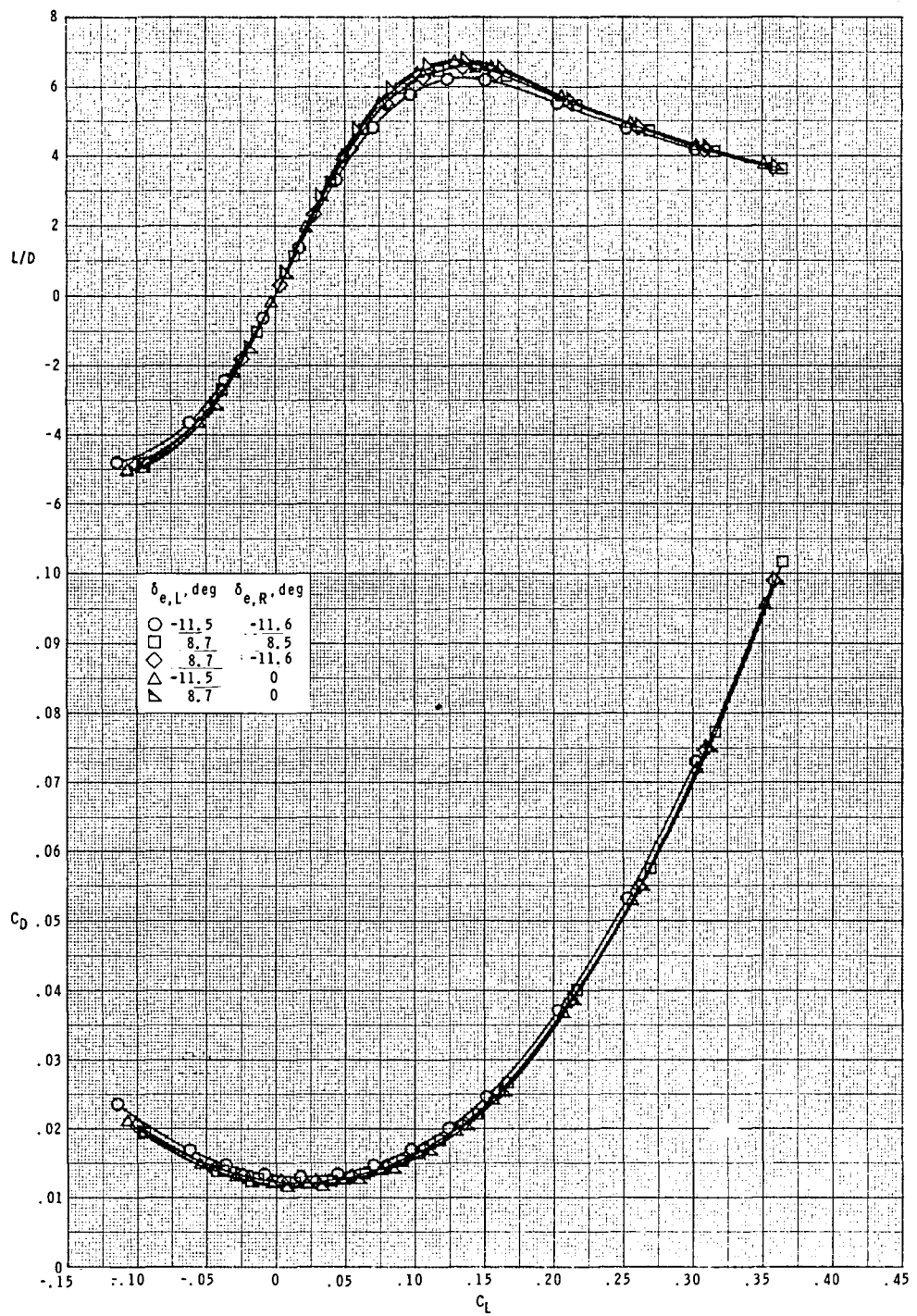
(b) Concluded.

Figure 17.- Concluded.



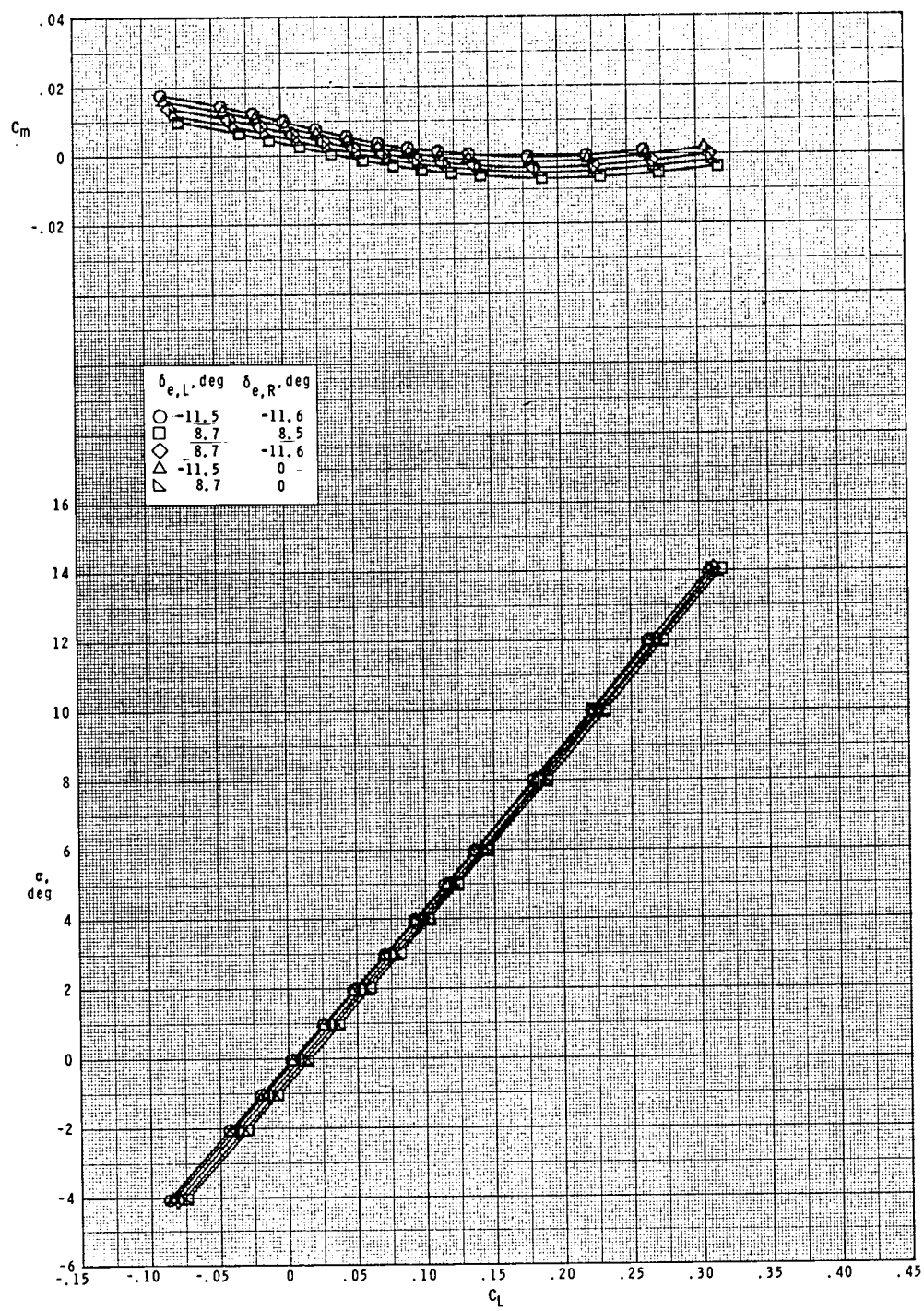
(a) $M = 2.30$.

Figure 18.- Effect of symmetrical and unsymmetrical control deflections on longitudinal aerodynamic characteristics of model.



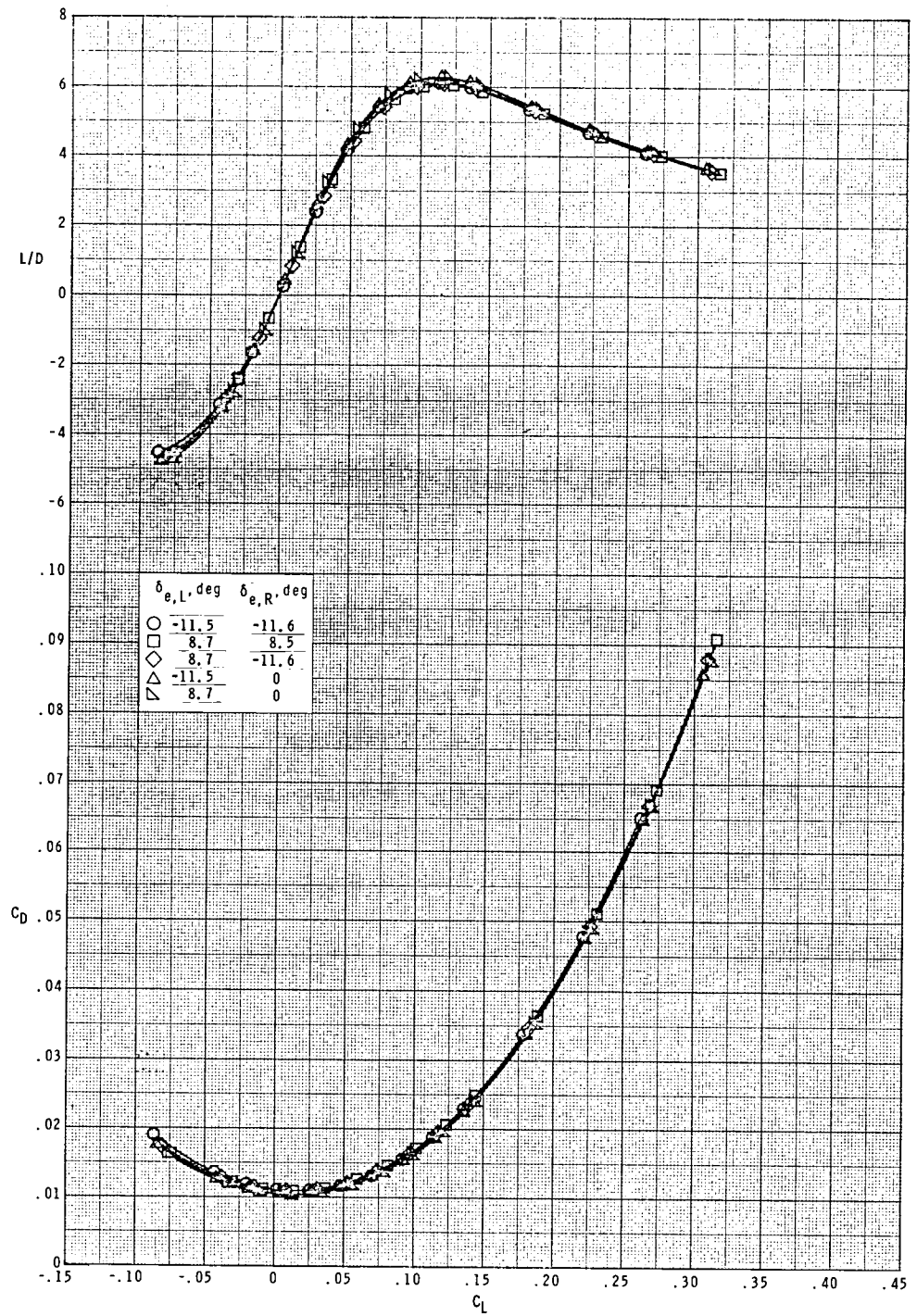
(a) Concluded.

Figure 18.- Continued.



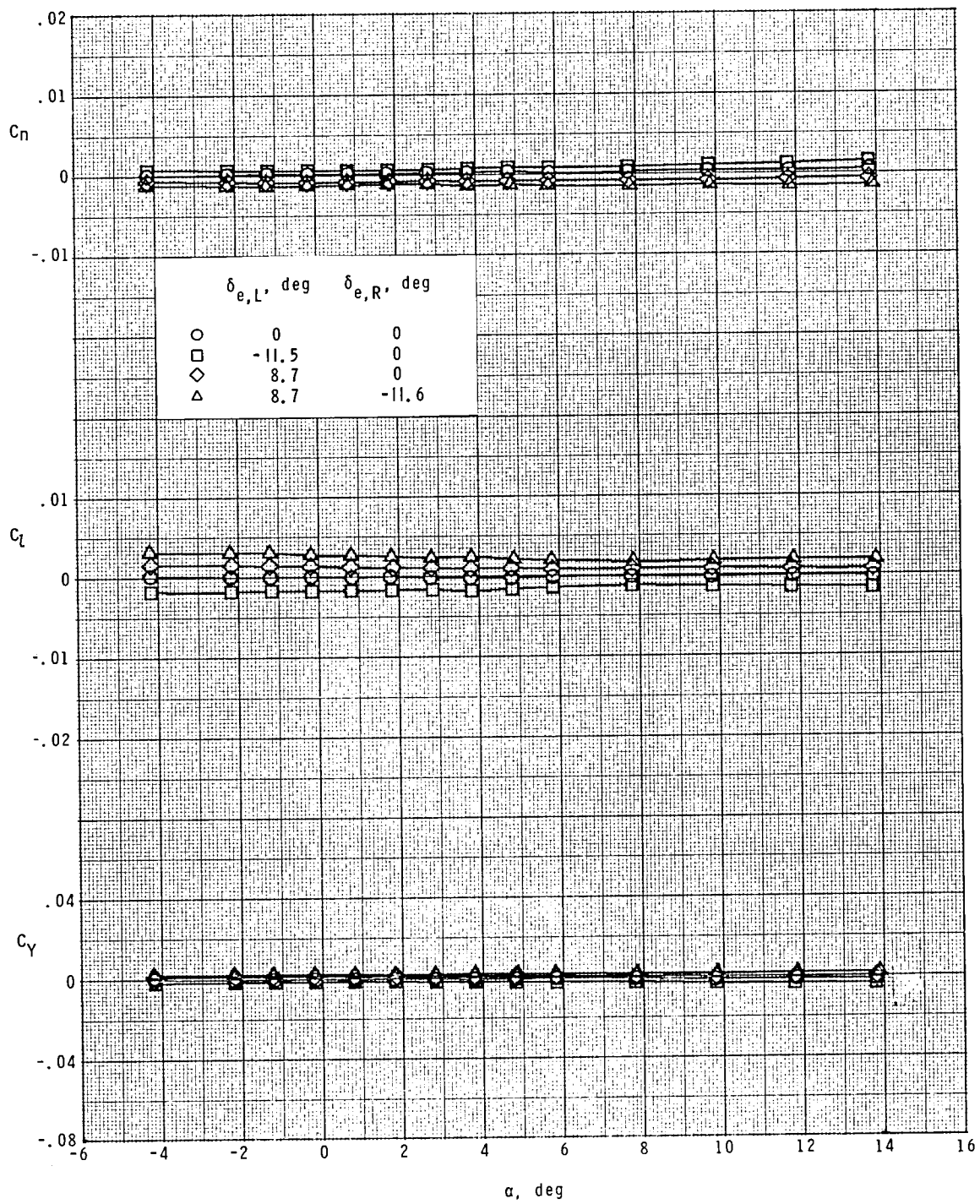
(b) $M = 2.96$.

Figure 18.- Continued.



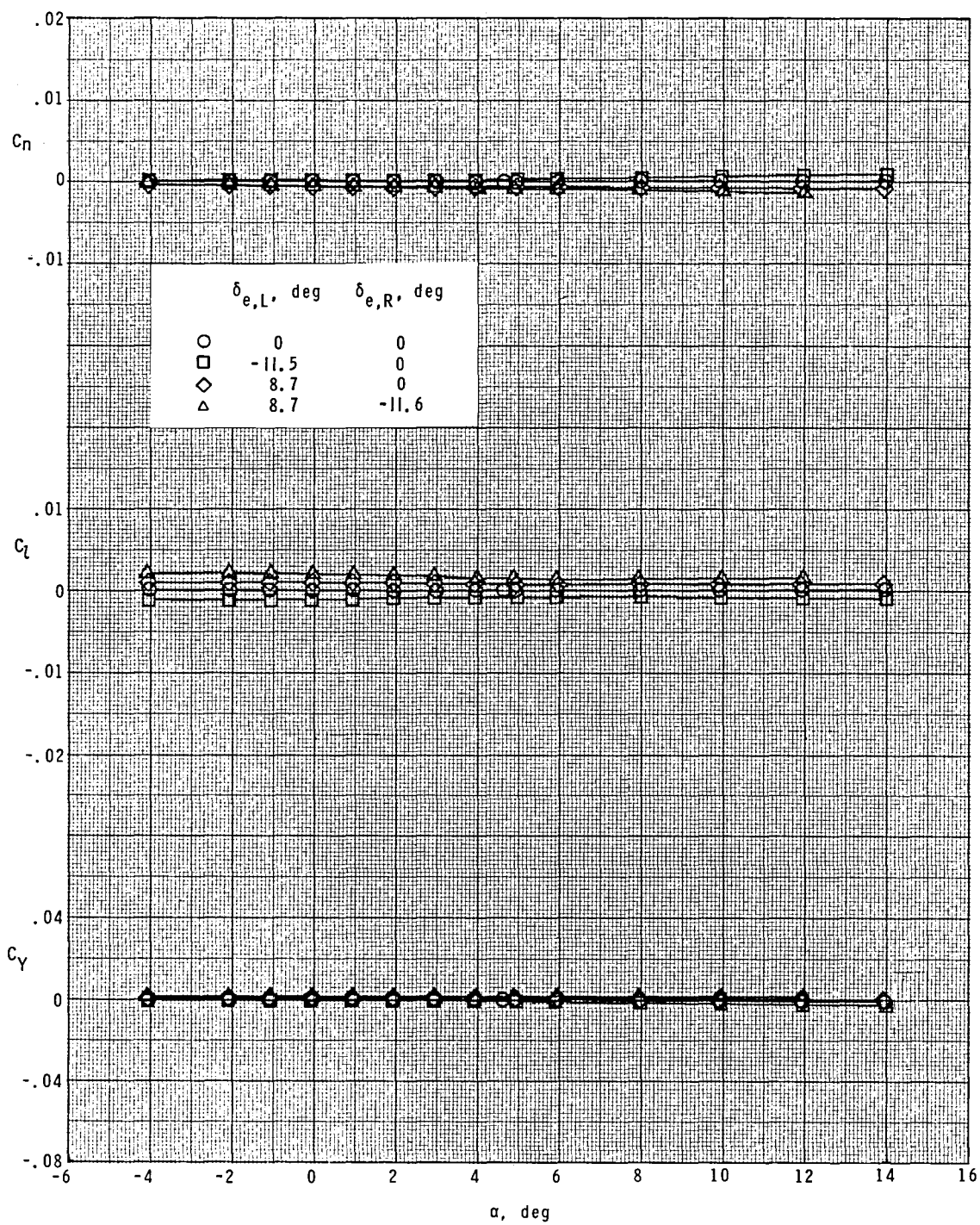
(b) Concluded.

Figure 18.- Concluded.



(a) $M = 2.30$.

Figure 19.- Variation of lateral-directional aerodynamic characteristics with angle of attack for various roll-control settings.



(b) $M = 2.96$.

Figure 19.- Concluded.

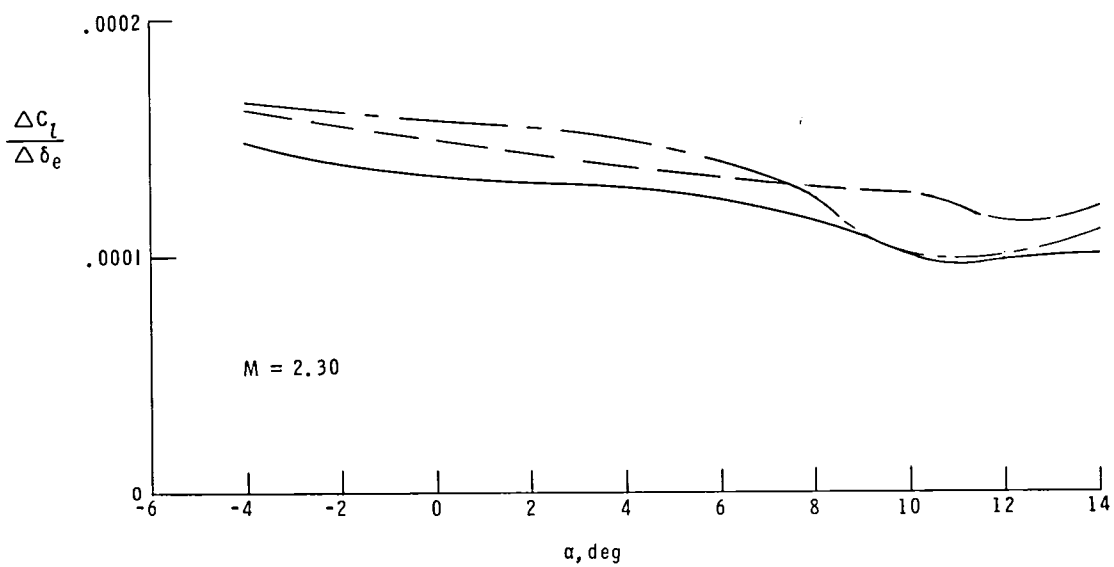
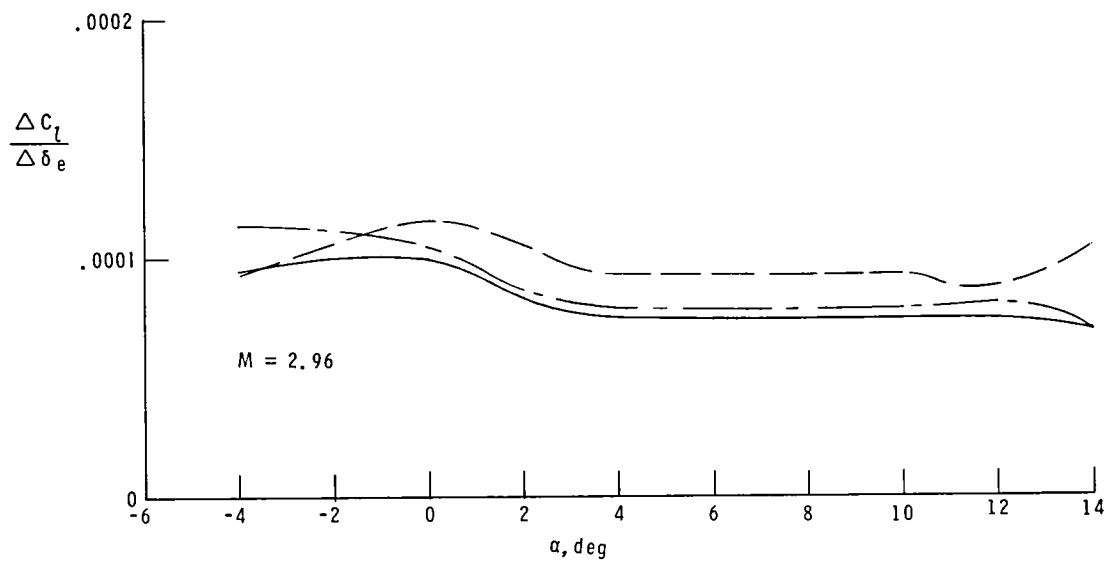
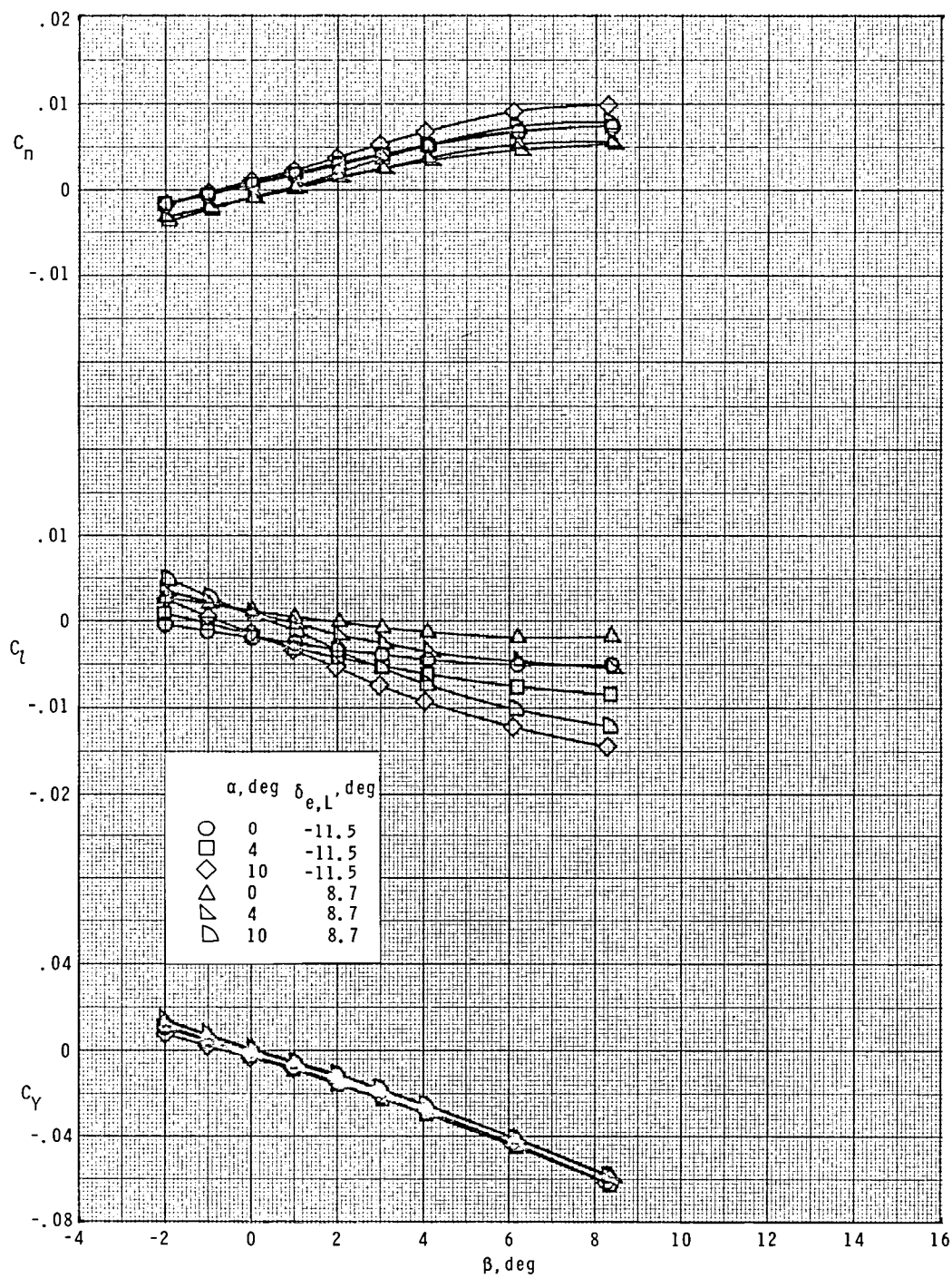
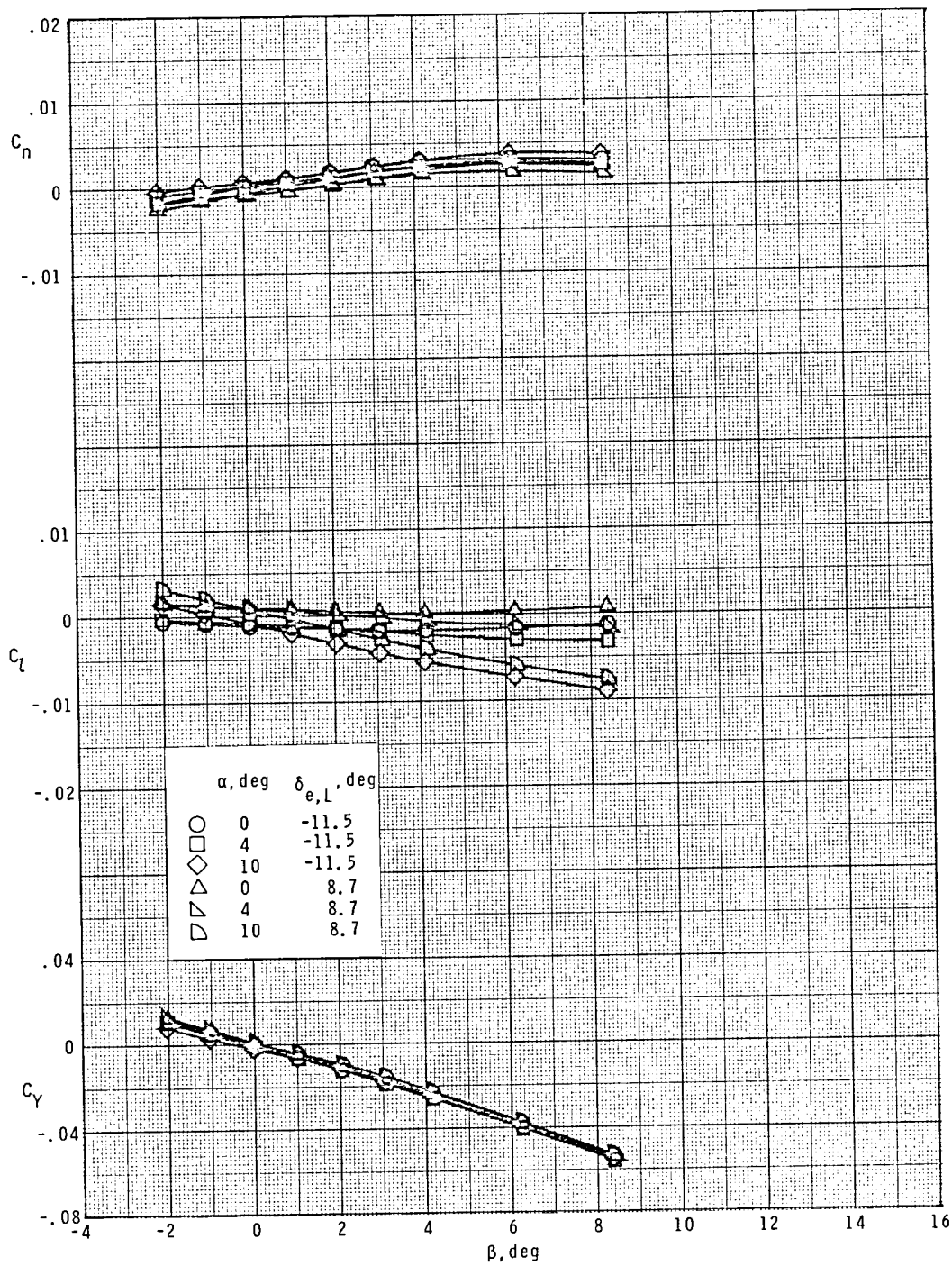


Figure 20.- Variation of roll-control power with angle of attack.



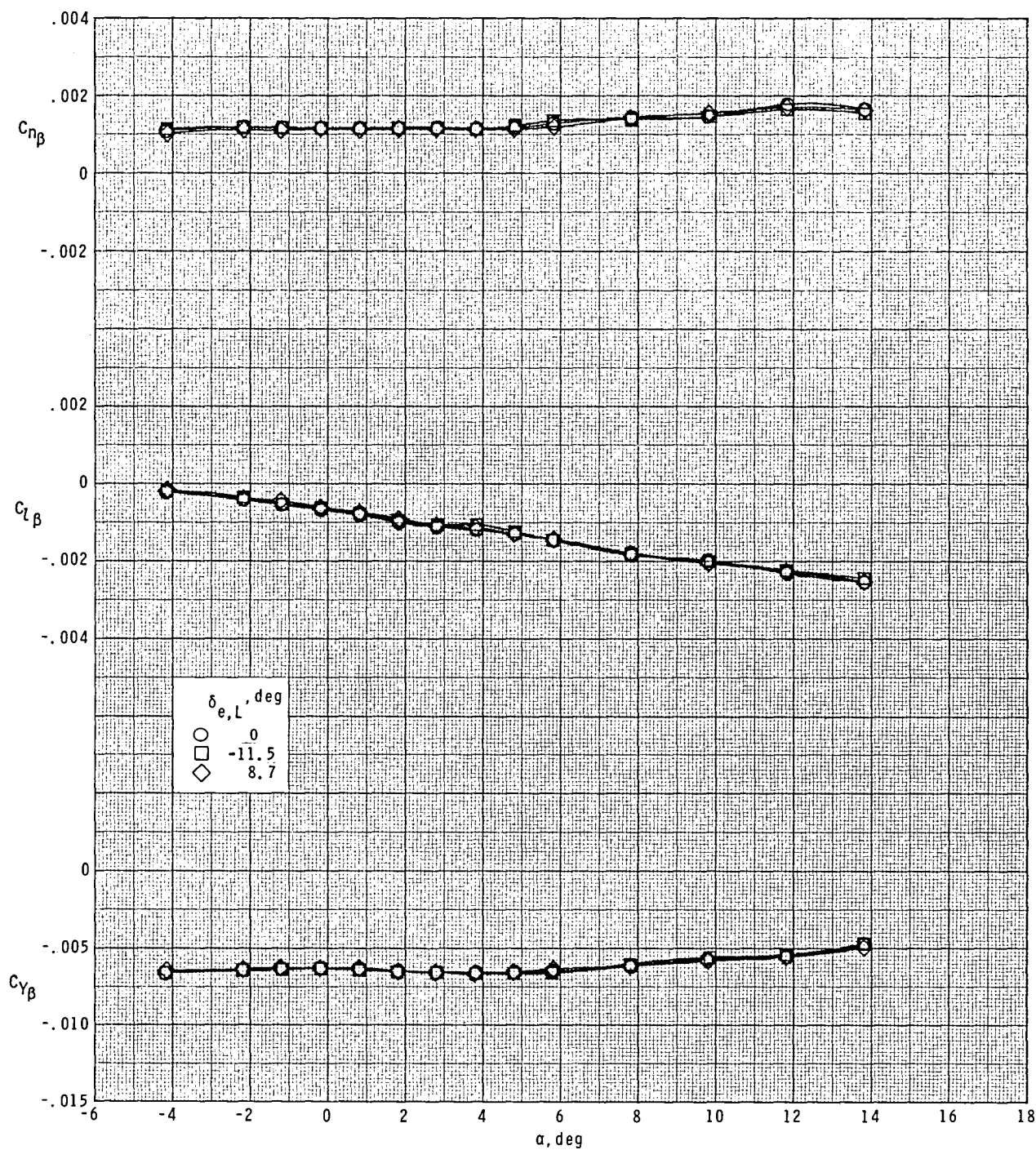
(a) $M = 2.30$.

Figure 21.- Variation of lateral-directional aerodynamic characteristics with sideslip angle for unsymmetrical control deflections.



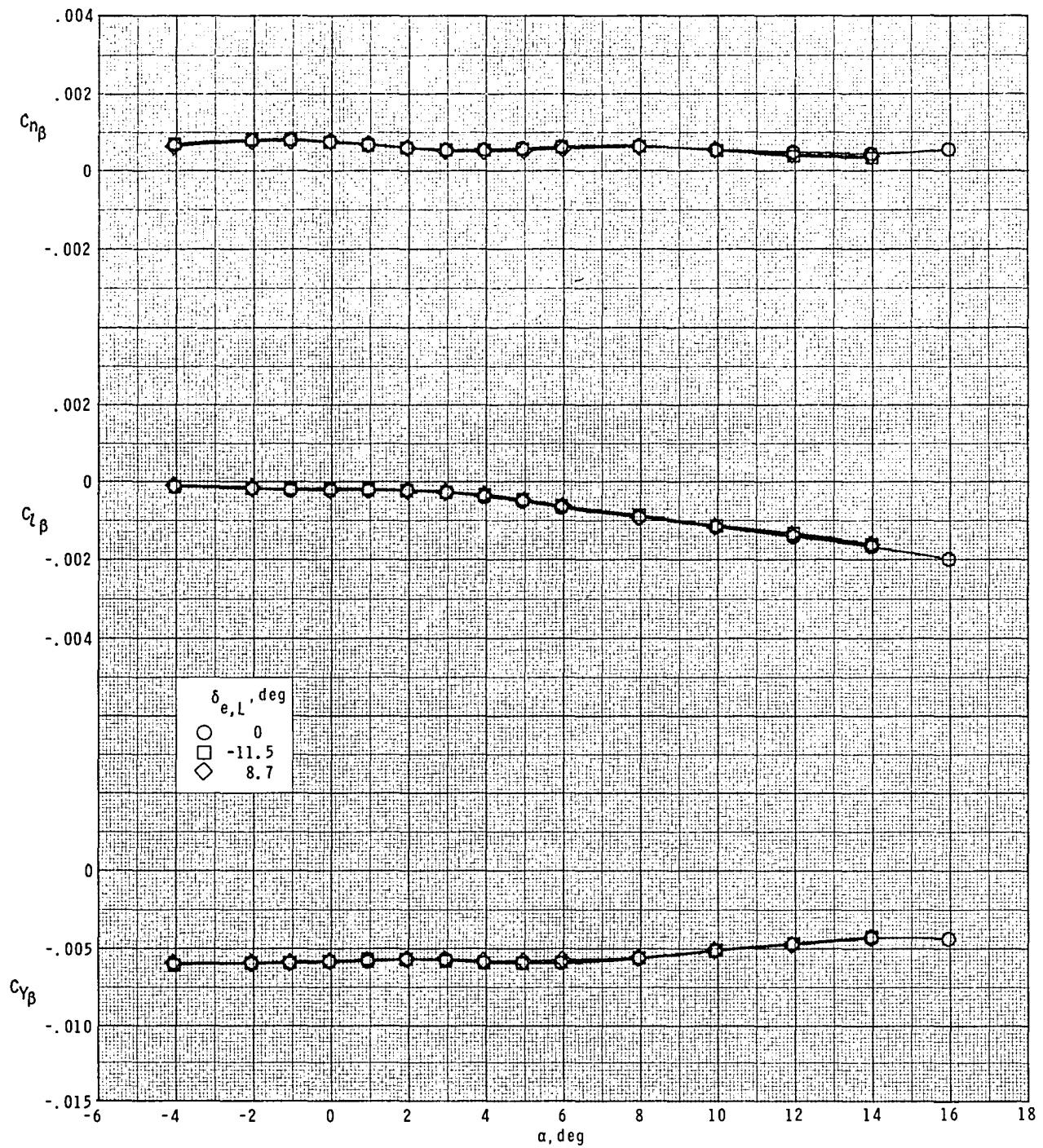
(b) $M = 2.96$.

Figure 21.- Concluded.



(a) $M = 2.30$.

Figure 22.- Effect of unsymmetric control deflections on variation of sideslip derivatives with angle of attack.



(b) $M = 2.96$.

Figure 22.- Concluded.

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16. Abstract An investigation was made in the Langley Unitary Plan wind tunnel at Mach numbers of 2.30, 2.96, and 3.30 to determine the static longitudinal and lateral aerodynamic characteristics of a model of a supersonic cruise airplane. The configuration, with a design Mach number of 3.0, has a highly swept arrow wing with tip panels of lesser sweep, a fuselage chine, outboard vertical tails, and outboard engines mounted in nacelles beneath the wings. For wind-tunnel test conditions, a trimmed value above 6.0 of the maximum lift-drag ratio was obtained at the design Mach number. The configuration was statically stable, both longitudinally and laterally. Data are presented for variations of vertical-tail roll-out and toe-in and for various combinations of components. Some roll-control data are shown as are data for the various sand grit sizes used in fixing the boundary-layer transition location.					
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